



Responsible Care

Wings of technology, Spirit of innovation

# UBE GROUP CSR Report 2006

Working for the **Economy**, **Society** and **Environment**

**UBE INDUSTRIES, LTD.**

## Corporate Profile

■ Company Name	Ube Industries, Ltd.
■ Founded	June 1897
■ Consolidated	March 1942
■ President and Group CEO	Hiroaki Tamura
■ Capital	¥58.3 billion (as of March 31, 2006)
■ Sales (Consolidated)	¥595.3 billion (Year ended March 31, 2006)
■ Employees (Consolidated)	10,673 (as of March 31, 2006)
■ Website	<a href="http://www.ube.co.jp">http://www.ube.co.jp</a>

The history of the UBE Group starts with the Okinoyama Coal Mine, established almost 110 years ago to develop the coal fields at Ube, Yamaguchi Prefecture. With its commitment to “living and prospering together” with the local community, the Company used the limited coal industry as a starting point to create industries that would give rise to unlimited value, developing a succession of new businesses needed by the times to bring long-lasting prosperity. Unremitting self reform, a desire to progress through original technologies and the ideal of sharing with various stakeholders—throughout our long history, these elements have made up the UBE Group’s core identity.

Today, more than a century after its foundation, UBE is a manufacturer of Synthetic Chemicals and Resins, including nylon resin and synthetic rubber; Fine Chemicals and Specialty Products, including electronics, battery materials and fine chemicals; Energy and Environment products, including coal and electric power; Cement & Construction Materials and Machinery and Metal Products, which include heavy machines, industrial machines and aluminum wheels, as well as a variety of other products. Through the five core business fields, UBE contributes to society with diversified products.

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Since its establishment 110 years ago, the UBE Group has continually built new business activities to meet changing needs. Our core business area today is chemicals. We supply a wide range of chemical products, including plastics, specialty chemicals and fine chemicals. In addition, we produce cement and construction materials, machinery and metal products, and are also involved in energy-related and environmental activities.

The UBE Group's founding values were to build infinite industrial activities from the finite resources of mining, and to achieve evolution through living and prospering together. Our group vision is contained in the words "Wings of Technology, Spirit of Innovation," which embody the corporate DNA that drives our success. Our continuing goal is to fulfill our corporate social responsibilities, and to earn and maintain the trust of the public through our wide-ranging activities.

In recent years, there has been growing interest in the concept of corporate social responsibility (CSR). Last year, in partnership with all stakeholders, we commenced a review and analysis of our corporate behavior and policies throughout our history. Our aim is to achieve further improvement in our activities by ensuring that all UBE Group personnel have a shared awareness of the importance of CSR, the role of the UBE Group, and our Personal Action Guidelines.

This CSR report focuses on the economic, social and environmental activities and initiatives by the UBE Group in fiscal 2005 (the year ended March 31, 2006). It also describes our targets for fiscal 2006.

From an economic and management perspective, it was a very successful year. A favorable macroeconomic environment, combined with the benefits of reforms targeting our financial and profitability structures, allowed us to meet all of the performance indicator targets set down in our current Medium-term Management Plan a year ahead of schedule. We selected the words "Speed and Reliability" as our keywords for this plan, which was launched in fiscal 2004 under the name "New 21•UBE Plan II."

There are still uncertainties surrounding the outlook for the current fiscal year, including persistently high raw material and fuel prices, rising interest rates and the state of the U.S. economy. We will continue our efforts to achieve our performance targets in readiness for a new surge of growth under our next Medium-term Management Plan, which starts in fiscal 2007.

We are also strengthening our corporate governance systems.

Last year, we appointed outside corporate directors, and this year an outside corporate director took office as Chairman of the Board of Directors. These changes have further strengthened management transparency and supervisory functions.

From a social perspective, our basic commitments are to provide good working environments, and to contribute actively to the community. We place particular importance on compliance with laws and regulations, and we are working to ensure and promote compliance by fostering awareness among all employees. We have revised our Personal Action Guidelines, which define key policies concerning employee behavior. Other measures include education based on e-learning and the reinforcement of internal audit functions.

Our environmental initiatives include participation in Responsible Care activities from the time when the program was established. We first introduced these activities for our chemical business in 1995, but the scope has since expanded to encompass all of the UBE Group's business operations. Our basic environmental philosophy calls for measures to protect the environment, safety and health at all stages of the product life cycle, from development and manufacture through to distribution, use, consumption and disposal.

We have stepped up our efforts to contribute to sustainable development. Recent initiatives include the development of products, such as specialty chemicals and fine chemicals, that help to protect the global environment, and the reduction of fossil fuel consumption through the use of biomass fuel in our IPP (Independent Power Producer) power plants. Other achievements include the development of effective uses for waste products and byproducts from cement production. Efforts such as these are helping to build the sustainable society of the future while also contributing to the survival and growth of our business activities.

I hope that this report will help you understand the activities of the UBE Group. We look forward to your continuing support and cooperation.

September 2006

Hiroaki Tamura  
President and Group CEO, Ube Industries, Ltd.

A handwritten signature in black ink that reads "Hiroaki Tamura". The signature is written in a cursive, flowing style.

# Wings of Technology and a Spirit of Innovation—These

The UBE Group's wide-ranging contribution to society includes the introduction of technology to reduce CO<sub>2</sub> emissions at power stations, and the supply of

## 216 MW Thermal Power Station (IPP)<sup>\*1</sup> Partially Converted from Pulverized Coal to Biomass<sup>\*2</sup> Fuel



216 MW pulverized coal/thermal power/biomass fuel manufacturing facility

### CO<sub>2</sub> Emissions Reduced by 100,000 Tons Per Year

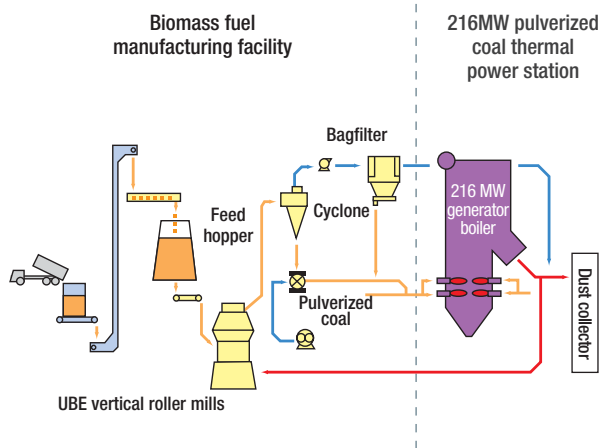
Most of the power stations operated by the UBE Group use coal as their fuel. The reduction of carbon dioxide emissions from these facilities is a priority from the perspective of global warming prevention. One of the initiatives currently being trialed by the Group's Energy & Environment Division involves the use of biomass fuel in a pulverized coal thermal power station. Biomass is a renewable resource that does not emit carbon dioxide.

Before biomass fuel can be used in a pulverized coal facility, it must be dried and pulverized. However, biomass materials, especially wood, are fibrous and elastic, which makes them difficult to pulverize. Since 2002, the Energy & Environment Division has been working to develop practical technology to support the efficient processing of biomass using upright roller mills. This work was funded by a grant from the New Energy and Industrial Technology Development Organization (NEDO)<sup>\*3</sup>.

This technology has now been implemented in a 216 MW pulverized coal thermal power station. Work began in December 2005 on the installation of equipment to allow the use of biomass fuel, and the converted plant became operational in July 2006. The Energy & Environment Division plans to use approximately 80,000 tons of woodchip biomass fuel annually. Coal consumption will be cut by about 9%, reducing annual CO<sub>2</sub> emissions by approximately 100,000 tons. The wood chip biomass will consist mainly of construction waste and will be sourced in collaboration with the Cement & Construction Materials Company. In the future biomass materials other than wood will also be used. New value is created when electric power is produced using a mixture of coal and biomass fuel, since a portion equivalent to the amount generated by the biomass fuel is classed as renewable energy electricity.

In 2003, the Japanese government introduced a new law providing for special measures relating to the use of renewable energy by electric power suppliers. Commonly known as the Renewables Portfolio Standard (RPS)<sup>\*4</sup> Law, this legislation requires electric power suppliers to use renewable energy to produce a specific percentage of their electricity. Alternative energy electricity produced by the UBE Group's IPP<sup>\*1</sup> will be sold to electric power operators as RPS credits.

#### Equipment flow



#### Message from an Employee



Electric Power Business Unit, Biomass Fuel Project

**Yukihiro Koyama**

#### Developing and Applying UBE Technology to Biomass-fueled Electricity Generation

Burning pulverized wood together with coal is easier said than done. The development of this technology was a long and difficult process involving numerous technical challenges. One of the most difficult tasks was the development of a method to treat large volumes of biomass efficiently. There are examples of processes in which wood biomass is pulverized together with coal. However, we solved the problem by drying and pulverizing the wood simultaneously in UBE's vertical roller mill and then mixing the wood with pulverized coal in an air-driven conveyor system.

We did this by developing new technology based on existing UBE technology. This is an example of UBE's corporate culture, DNA, in action.

# Words Describe the DNA that Drives Our Success

people-friendly and environment-friendly products and technologies, such as functional electrolytes manufactured without the use of toxic substances.

## For a Major Contribution to Improvement of Lithium-ion Battery Capacity, UBE's Functional Electrolyte Wins 38th JCIA Award

Lithium-ion batteries provide the power for a wide array of electronic information devices, including mobile telephones, notebook computers and digital cameras. UBE's advanced technology has resulted in the creation of a functional electrolyte for use in the manufacture of these essential products. In May 2006, this material received a prestigious General Excellence Award in the 38th technology awards of the Japan Chemical Industry Association (JCIA).

Users of electronic devices are demanding increasingly sophisticated performance in ever more compact and lightweight packages. One focus of intense research has been the development of materials, including high-performance positive active and negative active materials and electrolytes, for the lithium-ion batteries used to power these devices.

One of the substances used to manufacture electrolytes for lithium-ion batteries is dimethyl carbonate (DMC). UBE is the only Japanese manufacturer to produce this substance commercially using its own original technology. By developing a revolutionary process allowing DMC to be manufactured without the use of toxic chlorine compounds, such as phosgene, UBE has made an important contribution to the advancement of the Green Sustainable Chemistry (GSC)\*5 concept of environment-friendly chemistry.

In addition to this achievement, UBE has helped to enhance the performance of lithium-ion batteries through the development of high-purity additives for use in electrolytes, which are the lifeblood of these batteries. There was little interest in this area when UBE first commenced R&D, but in 1997 UBE attracted international attention when it succeeded in developing the world's first functional electrolytes.

There has been a three-fold improvement in the capacity of lithium-ion batteries since the development of this revolutionary technology. UBE's functional electrolytes have made an important contribution to this improvement in performance. These products have earned an excellent reputation in Japanese and overseas markets, and today UBE's functional electrolytes are used in the majority of lithium-ion batteries, especially mobile telephone batteries.

Functional electrolytes developed by UBE play an essential role in everyday life through their use in a wide range of electronic information devices. In addition to batteries for electronic information devices, they are likely to be used in batteries for electric-powered vehicles. As a world leader in electrolyte technology, UBE is poised to make a major contribution to protection of the global environment through the supply of clean energy.

### Products using lithium-ion batteries



A minicar powered by lithium-ion batteries



Mobile phone



Personal computer



Video camera



Digital camera

### Message from an Employee



Group Leader, Functional Product Technology Development Department  
[KINOHIN GIJUTSU KAIHATSUBU]

#### Koji Abe

#### Hoping to Reduce Environmental Loads

UBE is continually improving its functional electrolytes and already controls the largest share of the market with its unique dimethyl carbonate (DMC) products. This environment-friendly substance was the result of great effort by UBE's technical staff. I was involved in this project from the outset, and I still have a clear recollection of the joy that we felt when we succeeded in developing a world-class functional electrolyte.

There is now increasing interest in the use of batteries with DMC electrolytes in electric cars in the near future. I believe that our functional electrolyte technology will be the foundation for advances that will further contribute to the protection of the global environment.

### A Glossary

- \*1 **Independent Power Producer (IPP):** An IPP is a company involved in the wholesale electricity business.
- \*2 **Biomass:** Biomass materials are renewable energy resources derived from biological materials, such as thinning wood, timber mill waste, pruned branches, and construction waste.
- \*3 **New Energy and Industrial Technology Development Organization (NEDO):** NEDO plays a central role as one of Japan's largest technology development organizations. It was formed to promote and support research and development relating to renewable energy technology, energy conservation technology and environment-related technology, and to disseminate research results. It also conducts a wide range of advanced scientific research and development activities.
- \*4 **Renewables Portfolio Standard (RPS):** This system is used to promote increased use of renewable energy. Under a Japanese law establishing special measures relating to the use of renewable energy, electric power operators are required to generate a specific percentage of electric power sold each year using renewable energy resources. The aim is to ensure that energy can be supplied reliably and appropriately.
- \*5 **Green Sustainable Chemistry (GSC):** GSC is a global initiative to raise awareness of social responsibility among people and organizations that work with chemicals, and to encourage contributions to the environment and human health and safety and the development of the sustainable society through advances in chemical technology. In Japan, the Green Sustainable Chemistry Network (GSCN) was established in March 2000 to provide strong and effective support for GSC activities. It is a voluntary organization made up of 24 organizations, including academic and industry groups working in chemistry-related fields. The GSCN introduced the GSC Awards in 2001. The Minister of Environment Prize is given in recognition of achievements that contribute to a general reduction in environmental loads.

# CSR Activities by the UBE Group

In fiscal 2005, the UBE Group implemented a wide range of CSR activities, as described in this report. In accordance with the Group's basic CSR policy, these activities centered on three core areas: economic (management) activities, the environment and society.

## Basic Policy on CSR\*1 Initiatives

The history of the UBE Group starts with the Okinoyama Coal Mine, established almost 110 years ago to develop the coal fields at Ube, Yamaguchi Prefecture. With its commitment to "living and prospering together" with the local community, the Company used the limited coal industry as a starting point to create industries that would give rise to unlimited value, developing a succession of new businesses needed by the times to bring long-lasting prosperity. Unremitting self reform, a desire to progress through original technologies and the ideal of sharing with various stakeholders—throughout our long history, these elements have made up the UBE Group's core identity.

UBE has made the following commitments linking its corporate social responsibilities to its economy (management), the environment, and its relationship with society.



We will work to maximize our corporate value by continually improving our earnings, and by building a sound financial structure.



We will help to protect the global environment by supplying safe, environment-friendly products, services and systems, by working to reduce levels of toxic substances and waste products, and by implementing measures to prevent global warming.



We will work to establish compliance by strengthening corporate governance. At the same time, we will endeavor to provide good working environments and implement social contribution activities.

UBE will continue to work actively toward the sustainable growth of business and society through business activities guided by these three core commitments. We will also work to earn the trust of stakeholders, including stockholders, customers, suppliers, employees and regional communities, through accurate and appropriate disclosure of information.

## CSR Initiatives

In July 2005, the UBE Group formulated the Basic Policy on Corporate Social Responsibility (CSR) Initiatives and launched a CSR promotion system. The first step was to ascertain the current situation by "stocktaking" activities at various UBE Group sites. The corporate CSR Matrix was then developed as a framework for shared perceptions to guide future initiatives.

### CSR Topics for Fiscal 2005–2006

- Adoption of Basic Policy on CSR Initiatives
- Establishment of CSR Promotion Secretariat and formulation of CSR Matrix
- Our Personal Action Guidelines revised to reflect CSR perspectives
- Publication of CSR Report (expanded version of RC Report)
- CSR features included in in-house publications, coverage of CSR included in briefings for Group companies and in-house training programs
- Full update of public areas of corporate websites to enhance management transparency and expand content relating to accountability, including information relating to corporate governance, disclosure policies, and CSR activities
- Distribution of the CSR report at shareholders' general meetings
- Leave system for voluntary activities



"Our Personal Action Guidelines" (revised in March 2006)

### Message from an Employee



General Manager,  
General Affairs and Human Resources

**Wataru Shiosaki**

#### CSR Matrix

The CSR Matrix is a CSR promotion tool developed by the Nippon Keidanren (Japan Business Federation). It lists CSR processes according to tasks and stakeholders. After the establishment of the CSR Promotion Secretariat, we surveyed CSR activities at all UBE Group sites and used the CSR Matrix to color-code them into the "in progress" and "action not yet taken" categories. In this way, it was possible to build up a picture of the state of CSR activities in the UBE Group. In the past year, most of the "action not yet taken" items have been moved into the "in progress" category. The results are shown in the UBE CSR Matrix on Page 5.



Glossary

\*1 CSR: Corporate Social Responsibility

# CSR Promotion System

The UBE Group is continually developing a range of activities based on its basic CSR policy. The core organization for this work is the CSR Promotion Secretariat, which operates under the leadership of the director responsible for CSR.

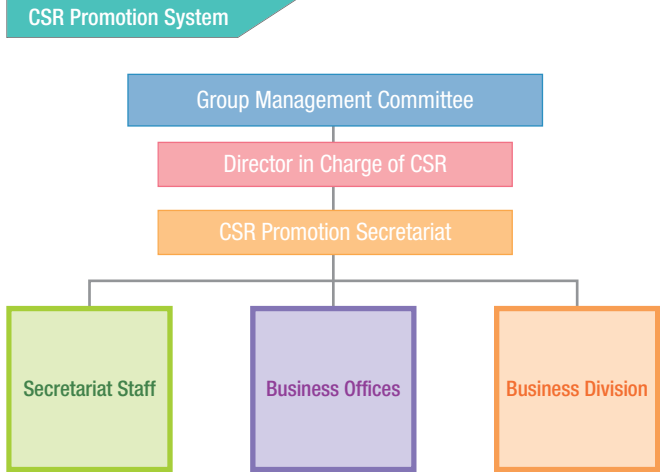


**Akinori Furukawa**

Director in Charge of CSR  
Senior Managing Executive Officer,  
Group Chief Compliance Officer  
(CCO\*), General Manager, General  
Affairs & Human Resources

The UBE Group's commitment to sustainability is reflected in its extensive range of CSR activities. In fiscal 2005 we achieved the numerical targets in our Medium-term Management Plan a year ahead of schedule, further strengthening our financial structure. At the same time, we continued our efforts to preserve the global environment, primarily through "Responsible Care" activities, including waste reduction, recycling and global warming prevention measures. We also worked to inform the public about the UBE Group's CSR activities through cultural activities, community cooperation and various other initiatives designed to foster good communication with all stakeholders.

We will continue to work toward harmonious coexistence with society by fulfilling our responsibilities through our corporate activities. We invite readers to send us their views, impressions and opinions concerning our activities.



## UBE's CSR Matrix

	Consumers/ customers	Suppliers	Shareholders	Employees	Politics, administration	Community	NPOs/NGOs	Developing countries	
Compliance	<ul style="list-style-type: none"> <li>Consistent commitment to fair trade and competition</li> <li>Antimonopoly Law compliance regulations</li> <li>Antimonopoly Law manual Compliance with consumer-related laws and regulations</li> </ul>	<ul style="list-style-type: none"> <li>Fair trading based on compliance with the Subcontract Act</li> <li>Fair and equitable purchasing (basic purchasing policy shown on external websites)</li> <li>Respect for intellectual property (basic trading contracts, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of corporate governance (executive officer system, outside directors and auditors)</li> <li>Prevention of insider trading (corporate regulations)</li> <li>Elimination of antisocial elements (action guidelines)</li> <li>Reinforcement of internal auditing organization</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of compliance organization (Compliance Committee, Compliance Promotion Secretariat, other committees)</li> <li>Establishment of UBE C-Line (notification system)</li> <li>Promoting understanding about business ethics and action guidelines (distribution of in-house newsletters and booklets, briefings, intranet pages, in-house training)</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate payment of taxes</li> <li>Elimination of bribery and corruption (action guidelines)</li> <li>Disclosure of political donation policy</li> <li>Prevention of false reporting (surveys, action guidelines)</li> </ul>				<ul style="list-style-type: none"> <li>Assessment of impact of investment and withdrawal</li> <li>Contribution to development of local industries</li> <li>Respect for local culture and customs</li> <li>Compliance with laws and regulations</li> </ul>
Business ethics	<ul style="list-style-type: none"> <li>Provision of accurate information about products and services</li> <li>Accurate representation of products and services (external websites, brochures, etc.)</li> <li>Discrimination of information about safe use (MSDS, warning labels, etc.)</li> <li>Provision of customer response information (customer contact services)</li> </ul>	<ul style="list-style-type: none"> <li>Disclosure of management philosophy and action guidelines (external websites)</li> <li>Disclosure of procurement policy and procedures (basic procurement policy and basic purchase terms shown on external websites)</li> <li>Promotion of communication (consultation meetings, safety meetings, etc., with suppliers)</li> </ul>	<ul style="list-style-type: none"> <li>Disclosure of information about financial position and corporate governance (IR activities (information on external websites, analyst briefings, visits to overseas investors))</li> <li>Disclosure of risk information (information about accidents, etc., shown on external websites, financial bulletins, financial statements)</li> <li>Disclosure of CSR information (CSR report, external websites)</li> <li>Distribution of CSR Report at the general shareholders' meeting</li> </ul>	<ul style="list-style-type: none"> <li>Disclosure of information about working conditions (information on intranet pages)</li> <li>Promotion of in-house communication (information on intranet pages, briefings, in-house newsletters, employee training)</li> <li>Privacy protection (rules for handling of employees' personal information, restrictions on disclosure of personal information)</li> <li>Promoting understanding about the handling of business secrets and other intellectual property (Thevention and Utility Model Committee, confidential information management regulations, e-learning, in-house newsletters)</li> <li>Nationwide corporate briefings for the UBE Group's 1,600 executives</li> </ul>	<ul style="list-style-type: none"> <li>Information disclosure as required by laws and regulations (regulators concerning prevention of insider trading and timely disclosure of internal information)</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of communication (regional dialogue meetings, factory visits, chemistry experimentation classes for children, blood drives, charity collections, road safety campaigns, support for local events and festivals, provision of lectures for universities, etc., acceptance of interns and factory trainees, acceptance of teachers for field training)</li> </ul>			<ul style="list-style-type: none"> <li>Promotion of communication</li> </ul>
Safety and quality	<ul style="list-style-type: none"> <li>Supply of high-quality, safe products and services</li> <li>Establishment of quality assurance systems (Product Safety (PL) Committee, quality assurance departments, quality management systems, QMP management system, MSDS compliance, participation in HPV, compliance with R4HS directives, etc.)</li> <li>Publication of MSDS information</li> </ul>	<ul style="list-style-type: none"> <li>Clarification of safety and quality requirements (purchase specifications, exchanges of basic terms, etc., cooperation in cost reduction efforts, inclusion of suppliers in safety management systems)</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate dividends</li> </ul>	<ul style="list-style-type: none"> <li>Creating safe workplaces (Group ES Committee, industrial accident prevention activities, process safety and disaster prevention activities, occupational health and safety management systems, Overseas Crisis Management Committee, manual for emergencies in Japan, start of work on development of major disaster response systems)</li> <li>Promoting understanding about safety and quality (CSR report briefings, information on intranet pages, quality management systems, education and information activities)</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with laws concerning product safety (Group Product Safety (PL) Committee)</li> <li>Establishment of security trade control system</li> </ul>	<ul style="list-style-type: none"> <li>Facility safety (eliminating occupational accidents, facility accidents and environmental accidents, Group ES Committee)</li> </ul>			<ul style="list-style-type: none"> <li>Clarification of safety and quality requirements</li> <li>Technology transfers and guidance in production technology, quality management methods, etc.</li> </ul>
Human rights, labor	<ul style="list-style-type: none"> <li>Improvement of accessibility of product/service information (product information on external websites)</li> <li>Advertising that does not offend consumers</li> </ul>	<ul style="list-style-type: none"> <li>Equality of trading opportunities (basic purchasing policy shown on external websites)</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced management of the general shareholders' meeting</li> </ul>	<ul style="list-style-type: none"> <li>Development of human resource systems that allow diverse individuals to achieve their full potential (Personnel Policy Committee)</li> <li>Equality of opportunity, elimination of discrimination (human rights education (Enhanced management of occupational safety and health and employee health (Thevention and Safety Inspection Committee, The Health Management Promotion Committee, The Safety and Health Committee, "Meet and Greet" campaign, health advisory services, mental health education, lifestyle disease seminars))</li> <li>Support for employee skill and career development (in-house and external training, support for self-education, overseas study programs, career development training, training for older employees)</li> <li>Dialogue and consultation with employees in good faith (The Labor Relations Committee, labor consultation meetings, The Complaints Committee, problem notification through UBE C-Line)</li> <li>Consideration for human rights (action guidelines, human rights education)</li> <li>Support for employees' work-life balance (parental leave, care leave, accumulated leave, nursing leave, flex-time)</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with labor-related laws and regulations (labor laws, Subcontract Act, Temporary Staffing Services Law, labor agreements, employment regulations)</li> </ul>	<ul style="list-style-type: none"> <li>Creating jobs</li> <li>Recruiting employees</li> <li>Employment for older people (reemployment of retirees)</li> <li>Creating jobs for disabled people</li> <li>Cooperation and dialogue toward the development of society based on respect for human rights (participation in human rights councils, in-house education)</li> </ul>			<ul style="list-style-type: none"> <li>Safety and health, enhancement of employee health management</li> </ul>
The environment	<ul style="list-style-type: none"> <li>Development and supply of products/services to reduce environmental loads</li> <li>Energy and resource conservation</li> <li>Reducing, Reusing and Recycling (the "three Rs")</li> <li>Reducing and cleaning up toxic substances</li> <li>Supplying environment-friendly products</li> <li>Distribution systems and packaging materials with reduced environmental loads</li> </ul>	<ul style="list-style-type: none"> <li>Promoting environmental initiatives</li> <li>Promotion of Green purchasing, green procurement</li> <li>Green distribution</li> </ul>	<ul style="list-style-type: none"> <li>Applying for inclusion in socially responsible investment (SRI)</li> </ul>	<ul style="list-style-type: none"> <li>Environmental education and information (environmental management systems, CSR Report briefings, no-car campaigns, promotion of office energy-saving)</li> <li>Environmental assessment of small-group activities and R&amp;D</li> <li>Asbestos countermeasures (establishment of the Asbestos Project)</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with environment-related laws and regulations (environment and safety management regulations, Group ES Committee)</li> </ul>	<ul style="list-style-type: none"> <li>Reducing environmental loads and risks (global warming countermeasures, contribution to the formation of recycling-oriented society, R&amp;D activities, Group ES Committee, CSR reports)</li> <li>Nature protection initiatives (including biodiversity conservation)</li> <li>Asbestos countermeasures (establishment of the Asbestos Project)</li> </ul>	<ul style="list-style-type: none"> <li>Cooperation and dialogue toward sustainable development (regional dialog meetings)</li> </ul>		<ul style="list-style-type: none"> <li>Transfer of environmental technology to trainees from developing countries (electric power, coal)</li> </ul>
Social contribution	<ul style="list-style-type: none"> <li>Promoting understanding about corporate social contribution activities (CSR Report, external websites) and providing support</li> </ul>	<ul style="list-style-type: none"> <li>Promoting understanding about corporate social contribution activities (CSR Report, external websites)</li> </ul>	<ul style="list-style-type: none"> <li>Promoting understanding about corporate social contribution activities (CSR Report, external websites)</li> </ul>	<ul style="list-style-type: none"> <li>Encouragement and support for voluntary community participation as members of society (voluntary activity support system)</li> </ul>	<ul style="list-style-type: none"> <li>Earning profit and paying taxes</li> <li>Development of environment for corporate social contribution activities (participation in the City's council on global warming countermeasures, industry-government-academia initiatives, including comprehensive cooperation, joint research and research grants in collaboration with Yamaguchi University, participation in local government events)</li> </ul>	<ul style="list-style-type: none"> <li>Investment of management resources in measures to overcome barriers to regional self-sufficiency (Ibe Industries Scientific Research Foundation, modern sculpture exhibitions, Watarabe Memorial Culture Association, etc.)</li> <li>The Industries Central Hospital, Ibe 7202, ANA Hotel Ibe</li> <li>Service as chamber of commerce directors</li> <li>Flower-growing campaigns, road cleaning activities, chemistry experimentation classes for children, blood drives, charity collections, road safety campaigns, support for and participation in local events and festivals, provision of lectures for universities, etc., acceptance of interns and factory trainees, acceptance of teachers for field training)</li> </ul>			<ul style="list-style-type: none"> <li>Acceptance of trainees from developing countries (electric power, coal)</li> </ul>



Glossary

\*1 CCO: Chief Compliance Officer

# Economy

Our mission is to enhance corporate value through sustained profitability improvement and the actualization of a sound financial structure.

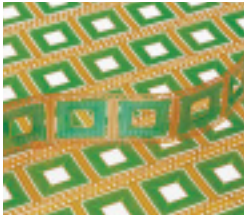



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## Introducing the Business Activities of the UBE Group

The UBE Group is globally active as a developer, manufacturer and supplier of a wide spectrum of products in five key business segments: Chemicals and Plastics, Specialty Chemicals and Products, Cement & Construction Materials, Machinery & Metal Products, and Energy and Environment.

<b>Chemicals &amp; Plastics Segment</b> <sup>*1</sup> <b>Main products:</b> <ul style="list-style-type: none"> <li>• Synthetic rubber</li> <li>• Nylon resins</li> <li>• Caprolactam</li> <li>• Industrial chemicals</li> </ul>				
	Uses for synthetic rubber	Uses for nylon 6: Automotive intake manifolds	Uses for nylon 12: Automotive fuel tubes, gas pipes, etc.	Uses for nylon 6: Food wrapping films





This is a key segment and has long formed the core of the UBE Group's chemical business. UBE is one of the world's top three manufacturers of caprolactam, which is the raw material for nylon. It is also one of Asia's biggest producers of nylon resins, which are used as engineering plastics in automotive parts, and in a wide range of other products, such as food wrapping film. Our synthetic rubber is used by all tire manufacturers in Japan. As a producer of these and many other products, the UBE Group helps to support industrial activities, infrastructures and lifestyles.

<b>Specialty Chemicals &amp; Products Segment</b> <b>Main products:</b> <ul style="list-style-type: none"> <li>• Functional materials Polyimide, battery materials, communication equipment, separation membranes, advanced materials, aerospace materials</li> <li>• Fine chemicals Paints, adhesives, resins, pharmaceuticals</li> </ul>				
	Example of use for polyimide film: Products for tape automated bonding (TAB) of ICs	Example of use for polyimide film: Dual-layer non-adhesive copper clad laminates (CCLs)	Marine-scented Aromatic Heliofresh®	Components for communications equipment

The UBE Group regards this as a core segment and has worked aggressively to expand its business in this area in recent years. UBE uses its own advanced technology to create sophisticated, high-value-added products, including electronic information materials and aerospace materials. Polyimide, an ultra-heat-resistant plastic that UBE produces from raw materials in an integrated production system, is widely used in products ranging from mobile telephones to LCD screens. UBE has also gained a large share of the market for electrolytes and separators for lithium-ion batteries.

UBE sells a wide array of fine chemicals as raw materials for use by manufacturers of numerous products, including pharmaceuticals, agricultural chemicals, aromatics, automobiles, luxury furniture, paints and inks. This area is expected to show further significant growth in the future.

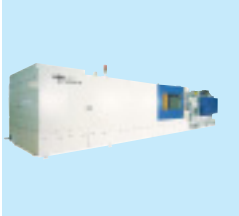
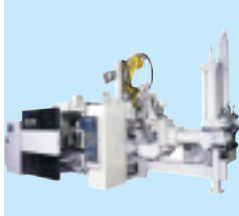


Contract production of pharmaceutical bulk and intermediates is another area in which UBE is able to draw upon its accumulated technology resources. The excellence of its technology is recognized by pharmaceutical manufacturers in Japan and overseas.

<b>Cement &amp; Construction Materials Segment</b> <b>Main products:</b> <ul style="list-style-type: none"> <li>• Cement</li> <li>• Lime stone</li> <li>• Clinkers</li> <li>• Ready-mixed concrete</li> <li>• Construction materials (Water proofing materials, plastering materials, flooring materials)</li> </ul>				
	A kiln at the UBE Cement Factory	Chlorine by-pass facility at the Kanda Cement Factory	Self-leveling materials	Water proofing materials

Cement is a vital material for social capital development. In recent years, there has also been growing interest in the potential of the cement industry to contribute to the formation of a recycling-based society through the effective utilization of industrial waste. The UBE Group has installed industrial waste processing facilities at its factories and actively uses a variety of waste products as raw materials for cement production. There are plans for further increases in the volume of waste processed.

The UBE Group offers an extensive line-up of materials to meet the changing needs of the construction industry. These include flooring and plastering materials and waterproofing materials.



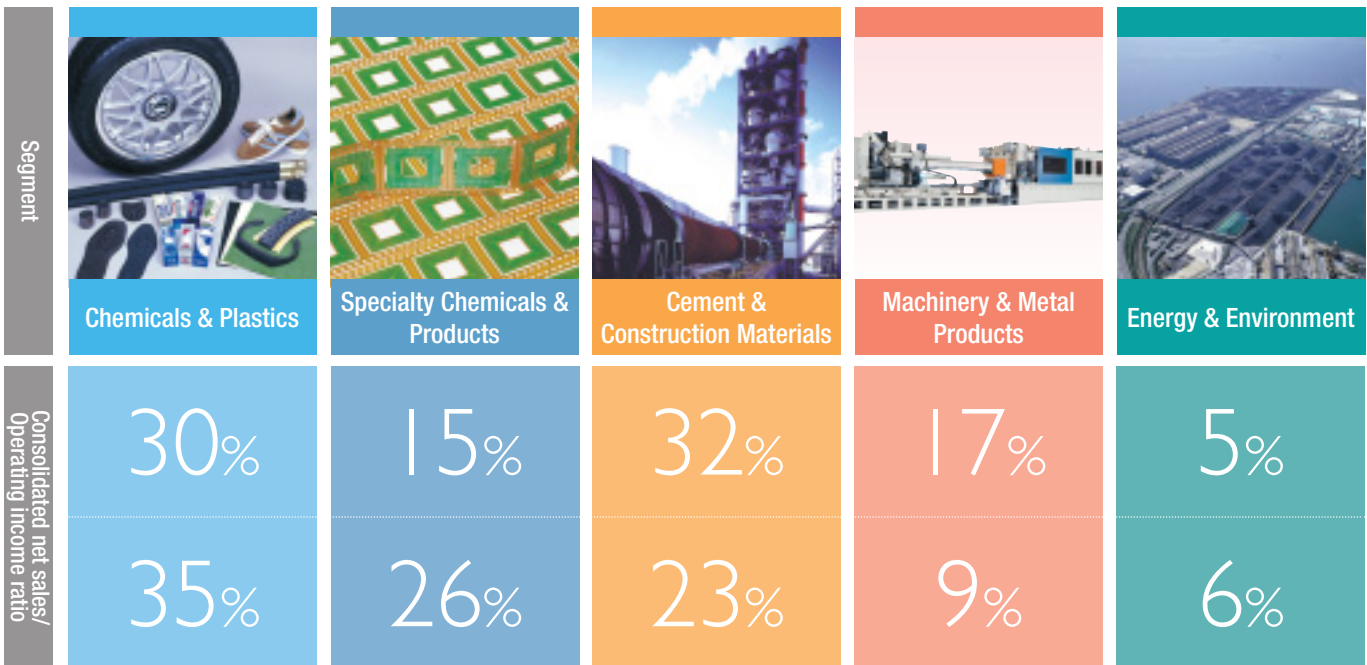
<b>Machinery &amp; Metal Products Segment</b> <b>Main products:</b> <ul style="list-style-type: none"> <li>Industrial machinery (Molding machines)</li> <li>Bridges, steel structures</li> <li>Aluminum wheels</li> </ul>				
	<b>All-electric large-scale injection molding machine (Ube Machinery Co., Ltd.)</b>	<b>Die-casting and injection-molding machines</b>	<b>The Kosan Bridge</b>	<b>Aluminum wheels</b>

UBE has earned an excellent reputation in Japan and overseas as a manufacturer of die-casting and injection-molding machines. The UBE brand stands for superb reliability backed by advanced UBE technology. UBE is also recognized for its contribution to the reduction of motor vehicle weights through the development of high-performance, high-quality aluminum wheels. These products are widely used in Japanese and foreign vehicles, especially luxury cars.

<b>Energy &amp; Environment Segment</b> <b>Main products:</b> <ul style="list-style-type: none"> <li>Coal</li> <li>Electric power</li> <li>Environment-related system</li> </ul>			
	<b>Okinoyama coal center</b>	<b>EUP two-stage pressure gasification system</b>	<b>216 MW coal-biomass mix thermal power station</b>

The UBE Group's overall energy infrastructure depends on the reliable supply of imported coal through the coal business, and the supply of electric power from in-house power stations. The Group is now implementing a new energy strategy that includes an involvement in electricity wholesaling. UBE's contribution to the reduction of global environmental loads includes the development of a revolutionary environmental system that breaks down waste plastic and other organic waste into hydrogen and carbon monoxide.

In fiscal 2005, our business performance continued to expand, centering on the chemicals business. As a result, net sales, operating income and ordinary income increased by 5.8%, 30.5% and 40.9% respectively over the previous fiscal year.



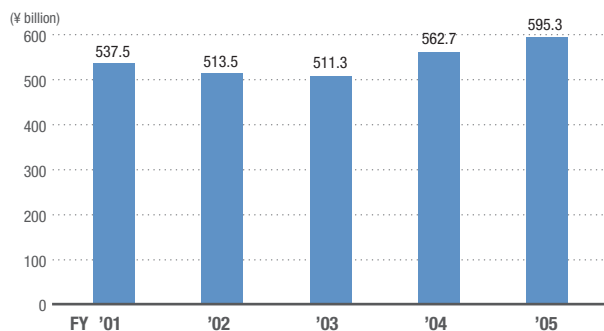
## A Glossary

\*3 **Segment:** Category of Operations. UBE Group presently recognizes six categories of operations for which profit and loss are accounted for individually: Chemicals & Plastics, Specialty Chemicals & Products, Energy & Environment, Cement & Construction Materials, Machinery and Metal Products, and Others. However, on all pages except p4-5, the listed data for Chemicals & Plastics and Specialty Chemicals & Products are combined.

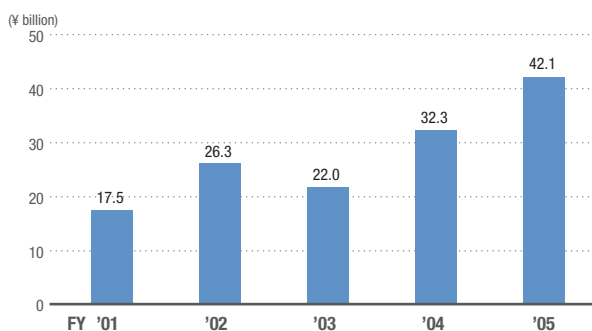
## Consolidated Financial Data

Business performance widely expanded for the year ended March 31, 2006, led by the Chemicals business. Net sales increased by 5.8%, operating income by 30.5%, and ordinary income by 40.7% compared with the previous fiscal year.

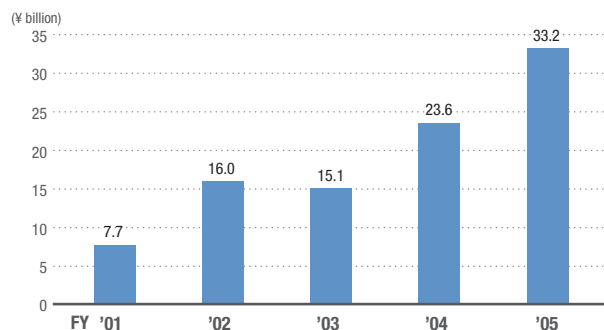
### Net Sales



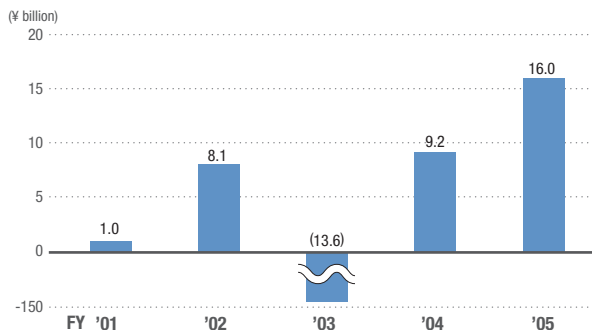
### Operating Income



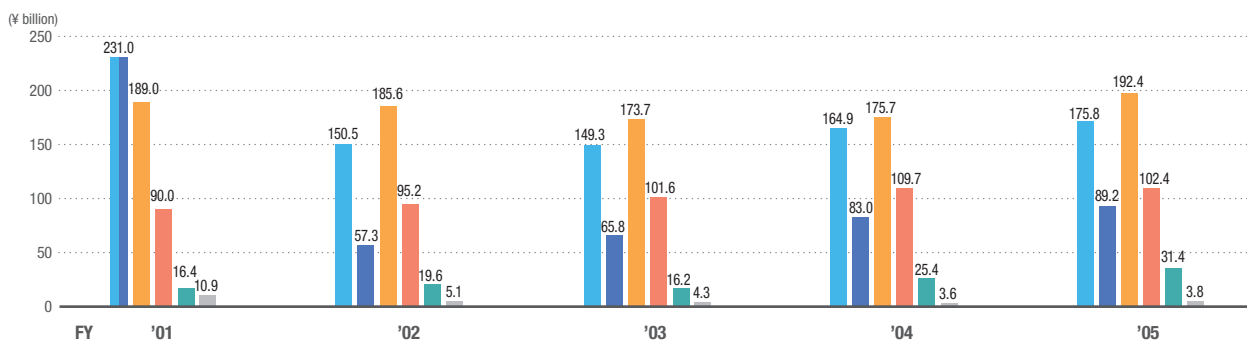
### Ordinary Income



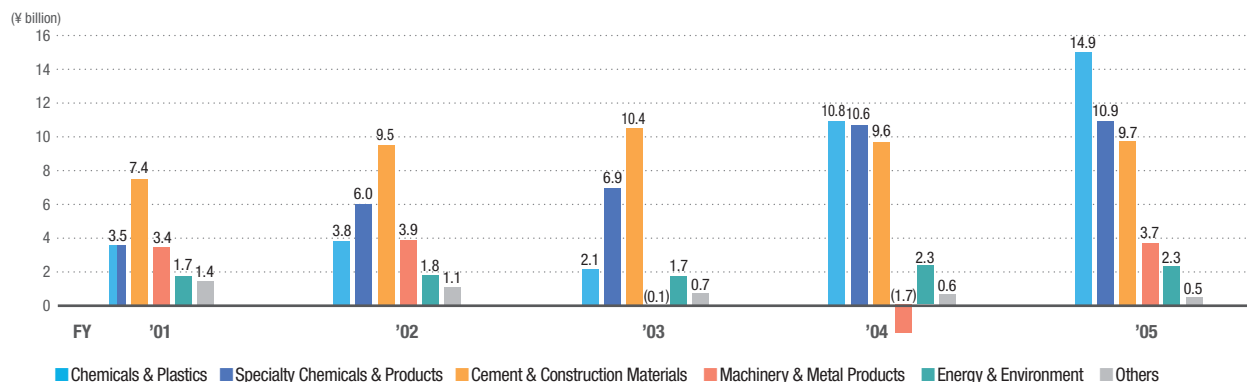
### Net Income



### Net Sales by Segment



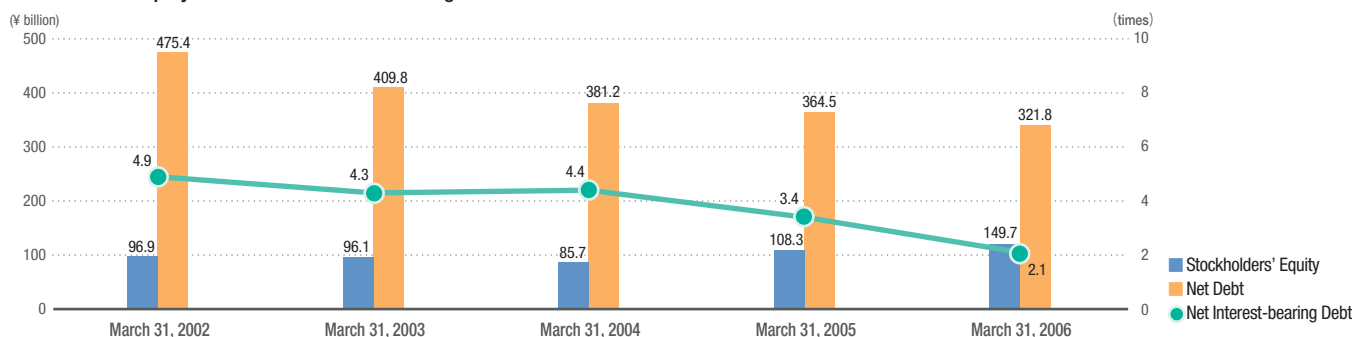
### Operating Income by Segment



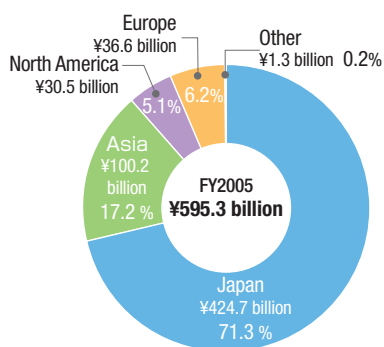
■ Chemicals & Plastics 
 ■ Specialty Chemicals & Products 
 ■ Cement & Construction Materials 
 ■ Machinery & Metal Products 
 ■ Energy & Environment 
 ■ Others

\*For fiscal year 2001, "Chemicals & Plastics" and "Specialty Chemicals & Products" are combined.

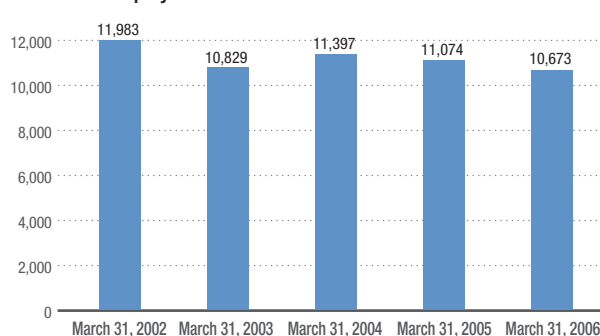
### Stockholders' Equity/Net Debt/Net Interest-bearing Debt



### Net Sales by Region



### Number of Employees



## Our Medium-Term Management Plan, New 21•UBE Plan II

The UBE Group is currently implementing a Medium-term Management Plan, "New 21•UBE Plan II," which covers the three-year period from fiscal 2004 to fiscal 2006.

### Key Points of the New 21•UBE Plan II

#### 1 Continuing the work to improve the financial structure

Net interest-bearing debt will be reduced through a maximization of operating income while capital investment will be held down. Capital investment over the three-year period will be limited to within 80% of amortization and debt depreciation.

#### 2 Strengthening and expanding the Group's business profitability

- Core businesses: expand operations by concentrating management resources while ensuring that we reap the returns of past investments.
- Fundamental businesses: generate stable cash flow through ongoing restructuring and cost-reduction efforts, thereby expanding our business scale.

The following numerical targets were set for financial and profitability restructuring measures under the plan. All indicators were achieved one year ahead of schedule in fiscal 2005.

Item	Unit	FY'04 (actual)	FY'05 (actual)	FY'06 (Medium-term target)
Net Debt/Equity Ratio <sup>*1</sup>	Times	3.4	2.1	2.9
Return on assets (ROA) <sup>*2</sup>	%	4.9	6.4	5.0
Operating margin	%	5.7	7.1	6.0
Stockholders' Equity ratio	%	15.3	21.4	17.1
Operating income	¥ billion	32.3	42.1	33.0

## A Glossary

\*1 Net D/E ratio: Net interest-bearing debt/Stockholders' equity \*2 Return on Assets: (Operating income + interest income + dividend income + investment profit and loss by equity method)/Total assets

# Society

In addition to its efforts to ensure good corporate governance and consistent compliance with laws and regulations, the UBE Group also provides quality working environments and implements a variety of social contribution activities.

- Aiming to Enhance Corporate Value ..... 10
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- Risk Management ..... 13
- Relationship with Employees ..... 14
- Health Care & Support ..... 16
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- Social Contribution Activities in Japan ..... 18
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## Aiming to Enhance Corporate Value

UBE believes that effective corporate governance is a basic requirement for sustained enhancement of corporate value. To achieve this, UBE has worked to build efficient and transparent decision-making systems and mechanisms to monitor decision-making. It has also focused on the development of appropriate relationships with various stakeholders, and on the development and reinforcement of internal control systems.

CSR activities are also seen as an essential part of management efforts to raise corporate value. Since its establishment, UBE has maintained a commitment to living and prospering together with the regional society, and has throughout its history contributed to the improvement of social capital. The UBE Group will continue to implement voluntary CSR activities.

Consistent fulfillment of corporate social responsibilities under a solid corporate governance structure is a basic requirement for sustained, long-term improvement in the corporate value of the entire UBE Group.

### Strengthening Corporate Governance

	2001	2002	2003	2004	2005	2006
Management transparency			Appointment of outside corporate directors			
			Election of an outside corporate director as Board Chairman			
Separation of governance and management	Establishment of executive officer system					
Directors' remuneration system		Introduction of performance-linked remuneration system				
			abolition of retirement bonuses for directors			
			introduction of remuneration system based on stock options			
Compliance structure	Formulation of Our Personal Action Guidelines (since 1998)					
			Establishment of Compliance Committee			
			appointment of Compliance Officers			
			introduction of problem reporting system			
	internal auditing by the Audit Department					
Optimization of management efficiency	Establishment of internal board committees responsible for director nomination, evaluation and compensation functions					
	reinforcement of head office systems • establishment of the General Administration Center					
Strengthening Group management	Management under Group management policies since 1999					
	formulation and implementation of Medium-term Management Plans					

## Corporate Governance

The basic mission for all of the companies that make up the UBE Group is to achieve stable, long-term enhancements of group-level corporate value. This requires the maintenance of good corporate governance as the basis for appropriate and sustainable business activities, so that the UBE Group can fulfill its responsibilities to and earn the trust of all stakeholders, including shareholders, customers, suppliers, local communities and employees.

### Corporate Governance Systems

In June 2001, UBE adopted an executive officer system with the aim of separating governance and management functions. The management team currently consists of eight directors and 19 executive officers, of whom five are also directors.

The Board of Directors makes decisions on important management-related matters, in accordance with the Company Articles and the Board Regulations. It also supervises the activities of directors and executive officers to ensure that all duties are being performed appropriately and efficiently. Executive officers carry out business operations in accordance with management policies determined by the Board of Directors, using authority delegated to them by the Chief Executive Officer.

In fiscal 2005, two outside corporate directors were appointed to the Board of Directors. Their role is to bring a third-party perspective to decision-making, thereby ensuring transparency and objectivity in management. To allow greater flexibility in the activities of the Board of Directors, subsidiary committees responsible for director nomination, evaluation and remuneration have been established. The Nomination Committee consists of seven directors and the Evaluation and Compensation Committee of six. Both committees are chaired by outside directors.

### Audit Systems

Internal audits are conducted by UBE's six-member Audit Department, which reports directly to the CEO. Audits cover the entire UBE Group, including overseas subsidiaries. Aspects checked include internal control and compliance with laws, regulations and manuals.

The purpose of these audits is to identify potential risks affecting any facet of the UBE Group's business activities. The General Manager of the Audit Department is also a member of group-wide risk management organizations, including the Compliance Committee and the Information Security Committee, and works closely with these committees to strengthen risk management systems.

The corporate auditor organization consists of four corporate auditors, of whom two are appointed from outside of the Company, together with two staff members in the Corporate Auditor Office.

Audits are conducted in accordance with the audit policy and audit plan, which are adopted each year.

The task of the corporate auditors is to ensure that directors and executive officers perform their duties appropriately by attending important meetings, including meetings of the Board of Directors, by examining important accounting documents, and by receiving reports on operations from directors and other officers.

There is close cooperation and regular exchanges of information between the corporate auditors and the Audit Department. For example, Audit Department staff will, if necessary, accompany corporate auditors to assist them with audit processes.

The corporate auditors meet regularly with the Company's independent auditors to gather information about audit plans and the state of audits in progress. They also hold regular meetings with the auditors of UBE Group companies, both to hear reports about audit activities, and also to improve audit quality through training seminars and exchanges of views.

#### Decision-making System

The UBE Group separates the functions of governance and management. It promotes transparency and efficiency in its corporate management by the following decision-making methods and procedures.

##### ① Board of Directors

The Board of Directors issues decisions on topics affected by company laws and relating to corporate policy and major company directives, acting in the best interests of stockholders and with an eye to the medium and long-term health of the Group. The Board of Directors is comprised of all UBE directors. The Chairman of the Board presides over meetings, which are held on an as-needed basis, but not less than once every three months.

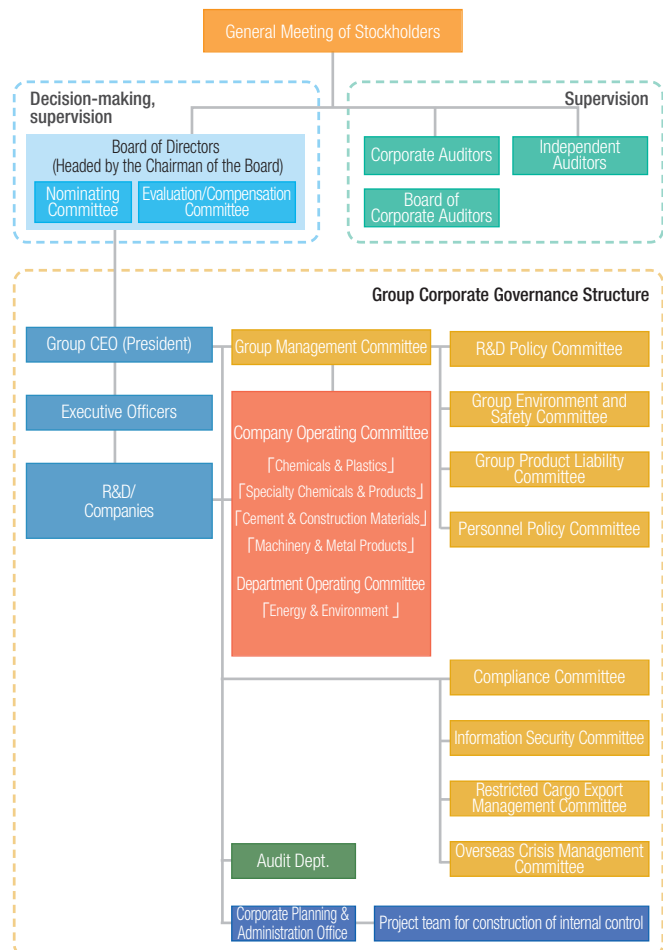
##### ② Group Strategic Management Committee

Based on the policy and regulations of the Group Management Committee, this committee discusses and decides issues relating to group-wide allocation of resources and other necessary items, including budgets and projections, medium-term business plans, capital investment and investment and loan plans, as well as other important items which impact the Group as a whole.

##### ③ Group Strategic Management Committee

This company-level committee discusses and/or makes decisions on UBE and UBE Group companies, Group strategy and other important issues based on Group policy and regulations.

### Group Corporate Governance Structure



## Compliance

Compliance, especially compliance with laws and regulations, is of fundamental importance to the fulfillment of corporate social responsibilities. UBE has always worked to ensure compliance in each segment of its business activities, including observance of requirements under the Antimonopoly Law and various regulations. However, heightened awareness of the social importance of compliance led UBE to strengthen its organization in this area in April 2003. Related measures included the establishment of new compliance systems, and the introduction of a notification system.

UBE completed development of compliance systems for each of its internal companies in fiscal 2005 and is now focusing on systems to ensure group-wide compliance.

### Our Personal Action Guidelines

UBE has been working to put "Our Personal Action Guidelines" into practice since their formulation in 1998. With the establishment of the new compliance structure in April 2003, the Guidelines became compliance standards for the business activities of all UBE Group companies and the actions of all directors and employees. They were extensively revised from a CSR perspective in fiscal 2005.

#### 1. Corporate Mission and Social Responsibility

We will strive to create new value and ensure continuing corporate development, while also actively fulfilling our corporate social responsibilities and contributing to sound social development.

#### 2. The Law and the Corporation

We will comply with Japanese and foreign laws and regulations and corporate regulations, behave as members of a sound society, and avoid involvement with antisocial elements.

#### 3. Social Trust and Rating

We will develop and supply useful and safe technologies, products and services that allow us to earn the trust of society.

#### 4. Impartiality and Sincerity

In our business activities in Japan and overseas, we will strive to maintain fair and free competition and perform our tasks in good faith.

#### 5. Safety and the Environment

We will work independently and actively to ensure safety and fulfill humanity's shared mission to protect the global environment.

#### 6. Human Rights and the Workplace

We will respect human rights in our business activities in Japan and overseas and develop healthy, bright and motivating workplaces.

#### 7. Information and Corporate Activities

We will strive to protect information and ensure accurate disclosure of corporate information, and maintain active and effective communication with society in general.

#### 8. International Society and the Corporation

As members of the international community, we will contribute to the development of the regions in which we are involved.

#### 9. Establishing Corporate Ethics

We will cooperate closely with UBE Group companies and suppliers to establish corporate ethics based on these Personal Action Guidelines.

### Overview of Compliance Systems

#### ■ Compliance Officers (COs)

Two directors were appointed as Compliance Officers. Their task is to promote and ensure compliance throughout the UBE Group by supervising compliance-related activities.

#### ■ Compliance Committee

The Compliance Committee advises the Compliance Officers and deliberates on important compliance-related issues.

To ensure transparency, a legal adviser has been invited to serve as an outside committee member.

#### ■ Compliance Promotion Secretariat

This unit administers compliance-related activities under the direction and supervision of the Compliance Officers.

#### ■ Notification Systems (UBE C-Line)

To prevent compliance violations and ensure the early discovery of problematic behavior, UBE has established systems that allow such problems to be reported without going through the normal chain of command, either directly to the Compliance Committee or the Compliance Promotion Secretariat, or to a legal adviser outside of the corporate organization.

#### Bid Rigging Incident

In September 2005, the Fair Trade Commission issued exclusion instructive notices against UBE Machinery Inc., a major company in the UBE Group, and 44 other companies as a result of bid rigging and other actions relating to steel bridge superstructure projects ordered by the Japan Highway Public Corporation and the Ministry of Land, Infrastructure and Transport. The UBE Group regards this as an extremely serious incident and has taken stringent disciplinary actions against those involved. The Group is now working to prevent recurrences of such problems by intensifying compliance assurance activities.

#### Message from an Employee



General Manager, Auditing Department

#### Kazuhiko Matsumoto

##### Implementing Compliance Audits

We made compliance the main theme for the Auditing Department's activities in the year ended March 31, 2006. During our internal audits, we visited approximately 150 corporate units, including the head office, branches, factories and research facilities.

We intend to gather a wide range of questions and comments about compliance issues that were puzzling and troubling employees in the course of their day-to-day activities. We aim to apply this information to the development of improved compliance systems for UBE. We also hope that employees will use compliance audits as good opportunities to review and think about compliance in their workplaces.

# Risk Management

UBE implements appropriate measures to identify and assess the probability and impact of risks that could prevent the attainment of its business objectives. The Group Environment and Safety Committee and the Group Product Safety Committee were established to formulate policies for the entire UBE Group and coordinate measures targeted toward specific types of risks.

Other committees and units established to deal with individual risk categories include the following.

## ① Compliance Committee

The Compliance Committee advises the Compliance Officers and deliberates on important compliance-related issues.

To ensure transparency, a legal adviser has been invited to serve as an outside committee member.

## ② Information Security Committee

This committee establishes and disseminates information security policies and monitors compliance with those policies.

It also develops rules and regulations concerning information security.

## ③ Restricted Cargo Export Management Committee

UBE is constantly reinforcing awareness within its group of the fact that the basic requirements of export management are to prevent illegal exporting or supplying of goods and technologies that are subject to export controls under laws and regulations designed to maintain international peace and stability, such as laws governing foreign exchange transactions and international trade.



## ④ Overseas Crisis Management Committee

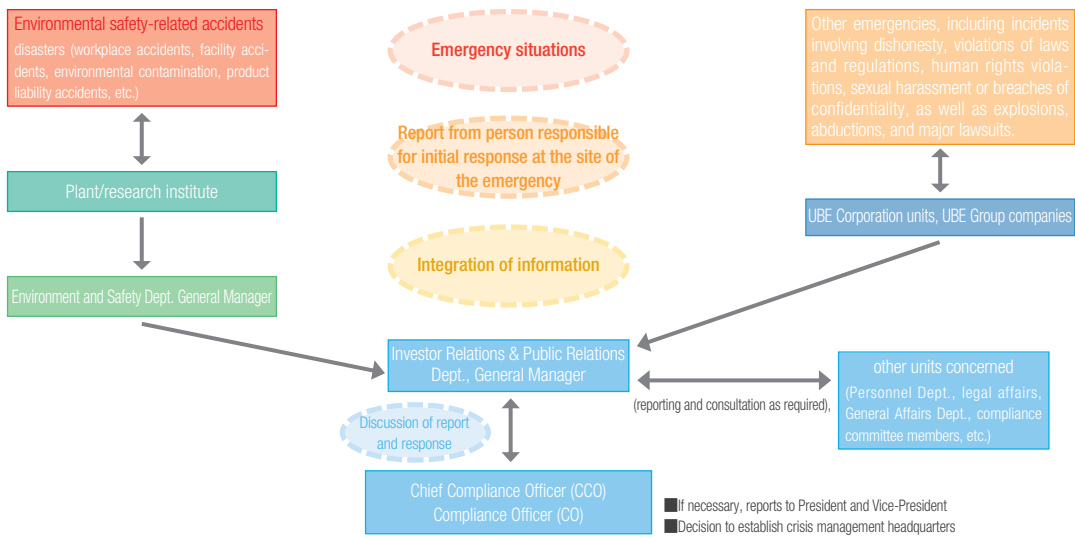
This committee was established in response to deteriorating law and order environments in some overseas countries at a time when the number of employees stationed overseas is increasing as a result of globalization. To ensure the safety of employees on overseas assignments and their families, as well as local staff and those making overseas business trips, the committee develops and maintains manuals and emergency response systems based on scenarios at different levels of severity.



## ⑤ E-Manual

The E-Manual stipulates procedures for the establishment of an emergency communications network and crisis management headquarters to deal with emergencies in Japan, both within and outside of the UBE Group.

### E-Manual Emergency Response Flowchart



### Message from an Employee



Information Systems Department  
**Kenichi Takemoto**

#### What is the Effect of Information Security on Business Activities?

We are the responsible secretariat for the Information Security Committee. We prepare the rules and standards needed to ensure information security. We also implement specific information security measures and run educational programs to ensure that everyone within the UBE Group is fully informed about these activities. In recent years companies have become increasingly aware of the need to respond to the risk that their business activities will be affected by natural disasters, such as earthquakes. UBE recognizes the importance of information systems as a corporate lifeline and has started to implement measures to cope with any interruption to those systems.

## Relationship with Employees

### Our Approach to Human Resource Development

The UBE Group regards human resources as the most important of its management resources. The development of “human resources who can contribute to the Company and society” is recognized as an important management priority. The basic philosophy behind the UBE approach to human resource development is that every employee should be a professional, which is defined as a person who has superior specialized skills in a particular field of work and is able to use those skills to produce results.

Under this policy, employees create individual career designs to support their professional development in their fields of activity. UBE helps them to build the necessary abilities through a combination of methods, including on-the-job training, group training, outside assignments and distance learning.

UBE has also introduced goal management and results-based elements into its personnel systems. The aim is to help individual employees to achieve their full potential through mechanisms that reward effort and results.

On-the-job Training (OJT) Training through work in the workplace, under the guidance of the workplace			
Off-the-job Training Training away from work and the workplace, under the guidance of the company			
Career Education [Group Education, External Courses]	Training by Theme [Group Education, e-Learning]	Selective Training [Group Education, External Programs]	Support for Self-improvement
<ul style="list-style-type: none"> <li>• Guidance and education for new employees</li> <li>• Follow-up training for new employees</li> <li>• Third-year training</li> <li>• Career design training</li> <li>• New management training</li> <li>• Middle-rank management training</li> <li>• New executive training</li> </ul>	<ul style="list-style-type: none"> <li>• Common specialized technology education</li> <li>• Patent training</li> <li>• Legal training</li> <li>• Compliance training</li> <li>• Information security training</li> <li>• Human rights education</li> <li>• Environment and safety education</li> <li>• Assessor training, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• International business personnel development                             <ul style="list-style-type: none"> <li>Overseas MBA programs</li> <li>Practical training with overseas subsidiaries</li> <li>Law school programs</li> </ul> </li> <li>• Leadership training                             <ul style="list-style-type: none"> <li>Business leadership training</li> <li>Management leadership training</li> </ul> </li> <li>• External programs for research and technology personnel                             <ul style="list-style-type: none"> <li>Programs in universities and research institutes in Japan and overseas</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Skills and qualifications                             <ul style="list-style-type: none"> <li>Distance education courses</li> <li>Achievement of official qualifications</li> </ul> </li> <li>• Languages                             <ul style="list-style-type: none"> <li>TOEIC exams</li> <li>Conversational foreign language courses</li> </ul> </li> </ul>

### Environment and Safety Education

Human resource development activities include the following environment and safety education programs run by UBE’s head office for employees. UBE encourages all workers to acquire knowledge, practical skills and qualifications, including public certifications required for the operation of equipment in factories.

Targets	Contents
New employees	Responsible Care, Basics of Safety, Health Care & Support, etc.
Environment and Safety Management level staff in plant	Correspondence course on Safety and Health
Maintenance persons for High-Pressure Gas	Held technical exchange meeting to give mutual presentations
All UBE Group employees	Education and detailed reporting on approaches to CSR and responsible care (RC) at CSR report briefings
Applicants	Training for internal auditors in occupational safety and health ISO standards relating to product quality management and environmental management, and education for managers and supervisors on occupational safety
UBE Group persons in charge of Environment and Safety	Training in explanation of revisions to laws; training in UBE group-wide policy discussion
Directors	Environment and safety topics affecting the Company significantly

In addition, mental health training has been added to the curriculums for career education, such as training for new managers. The aim of this approach is to ensure that employees have access to training that reflects their particular circumstances.

From the current year onwards, environmental impact assessments will be included in facility reports and proposals for small-group activities. The aim of this change is to ensure that all employees are fully aware of environmental issues.



## Quality Working Environments

### ① Promoting Human Rights Awareness

Respect for human rights is a fundamental rule guiding the corporate activities of the UBE Group.

The Group is working to develop and maintain working environments in which all employees are respected as individuals, by implementing a range of initiatives to ensure that all employees understand human rights and are fully aware of related issues.

The Human Rights Issue Education Promotion Committee was established to provide human rights education as a way of helping people to work together while accepting each other's differences.

In addition to executive training, employees are also sent to attend outside courses.

### ② Employment for the Disabled

UBE is actively creating employment opportunities for the disabled. In 1991 it established its first special subsidiary for this purpose, Libertas UBE, Ltd., in Yamaguchi Prefecture.

Initially Libertas Ube only employed physically disabled workers, but in fiscal 2003 the scope of employment was expanded to include intellectually disabled workers. As of June 2006, 26 disabled people were working for Libertas Ube.

In addition, UBE helps disabled people to participate in their communities by cooperating with related organizations. This support includes the contracting of various types of work, such as cleaning services for employee accommodation, in cooperation with occupational facilities for the disabled.

As a result of its sustained efforts to expand employment for the disabled, UBE was again able to meet the statutory ratio in fiscal 2005. In the future, UBE plans to establish the UBE Group Disabled Employment Support Network (provisional name) as a framework for knowledge and information sharing and job creation and consolidation.

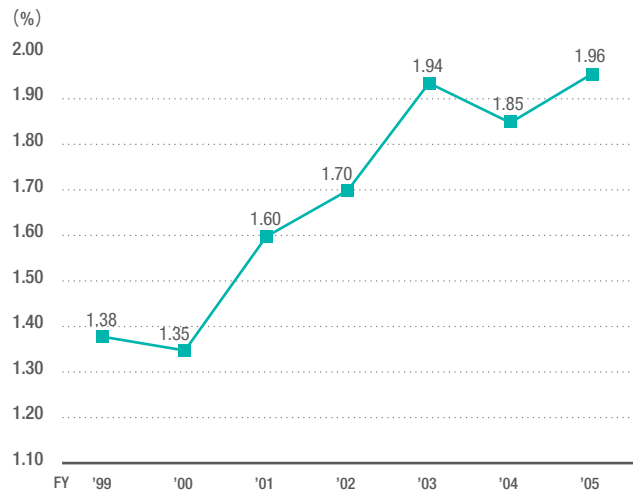


Libertas Ube employees at work



All Libertas Ube employees

## Ratio of Disabled Employees (Fiscal year average)



### ③ Employment of Older Workers

In fiscal 2006, the UBE Group introduced a reemployment scheme for retired workers. Positions will be provided primarily in the human resource development area, so that retired workers can pass on their accumulated skills and experience.

Retirees will be employed under renewable contracts until they reach the age of eligibility for pension payments, as determined by the government.

### ④ Leave System for Voluntary Activities

UBE employees are able to accumulate leave entitlements for special purposes. In fiscal 2006, this system was expanded to include the use of up to seven days annually for voluntary activities that contribute to society or local communities.

## Message from an Employee



Human Resources Group Leader  
Human Resources Department

**Hideo Tamada**

#### Social Contribution Initiatives

In the year ended March 31, 2006, UBE modified its accumulated leave system to allow employees to use their leave for a range of voluntary public service activities. These include activities by firefighting organizations, local community associations and PTAs, as well as disaster relief activities. This change will allow employees to participate actively in their communities through local activities. I believe that it will contribute to harmonious coexistence, shared prosperity, and sustainable prosperity in regional communities. One of the basic goals of our CSR activities is the development of good working environments. We aim to achieve continuous improvement through consultation with the unions on specific themes, such as human resource systems, safety and health.

## Health Care & Support

The UBE Group regards health management for employees as an important area of management policy. In line with this basic principle, the Health Care & Support Center actively supports initiatives by employees to maintain and improve their mental and physical health. The main health care and support measures implemented in the year ended March 31, 2006 are outlined below.

### Developing a Comfortable Workplace

#### 1 Meet and Greet Campaign

The aim of this campaign is to promote mental health, prevent industrial accidents and foster good workplace communication by encouraging workers to exchange words of greeting and encouragement. In fiscal



2005, banners promoting the campaign were displayed in all UBE Group 50 sites.

Monitoring the "Meet and Greet" campaign (parking lot, UBE head office)

#### 2 Designated Smoking Area Program

In May 2002, Yamaguchi Prefecture became the first region in Japan to introduce a certification system based on levels of smoker segregation. In July 2002 a new health promotion law drafted by the Ministry of Health, Labour and Welfare took effect, and in August of the same year UBE became the first private enterprise in Yamaguchi Prefecture to achieve the top level of certification (level 3) under the system in Yamaguchi Prefecture.

The UBE Group has since achieved certification at several sites each year, and three more were certified in fiscal 2005. Inspections based on this system are also being carried out at sites outside of Yamaguchi Prefecture. To date a total of 121 facilities at 18 sites have been certified.



Inspection for smoker segregation level certification (Nishioki Factory)

#### 3 Preventing Overwork

In April 2006, the Ministry of Health, Labour and Welfare announced plans to intensify its efforts to prevent health damage resulting from overwork. UBE has contributed to the mental and physical health of its employees and the development of good working environments by tightening above-mentioned rules in this area. For example, employees who work 45-80 overtime hours per month, including weekend work, are encouraged to consult an industrial physician if the physician deems this advisable based on a comparison of the employee's medical questionnaire and the results of health examinations.

Employees who work over 80 hours of overtime in a month are required to consult an industrial physician or other professional and seek health advice.

### Message from an Employee



Industrial Physician General Manager, Health Management Office, Health Care & Support Center

#### Taku Iwamasa Mental and Physical Health

Each of us has strengths and weaknesses, both physical and mental. It is important to prevent illness by identifying our physical weaknesses through regular medical checks and other methods. As with our physical health, we also need to check our mental health from time to time.

Mental health seminars held by the Safety and Health Committee serve as forums in which workers are informed about ways to achieve this, and I hope that everyone will take advantage of these opportunities. Our mission as industrial health workers is to prevent mental and physical illness among employees. We look forward to your continuing support and cooperation.

### Lifestyle Disease Countermeasures

#### 1 The "One-month Challenge"

This campaign was introduced to promote health awareness and motivate employees to improve their lifestyles.

Employees work to improve the results of health checks by working one month prior to check-ups to improve their lifestyles from the perspectives of health promotion and disease prevention.

This activity provides a direct experience of the potential of lifestyle changes to improve health.

#### 2 Walking Rallies

To consolidate the habit of taking exercise, all UBE Group employees are encouraged to participate in the walking rally program.

Computer records showing the number of steps taken in each month allow participants to monitor their progress on their own computers. In fiscal 2005, 588 employees participated.

#### 3 Improving Diet

Dietary imbalances are a major cause of lifestyle diseases. In fiscal 2005 UBE launched a three-year scheme to improve the dietary environment.

The aim is to change employee attitudes to food and nutrition by surveying and improving the dietary environment in employee dining rooms and accommodation facilities.



Nutritional information placed on tables in an employee dining room

### Mental Health Initiatives

Mental health has become an increasingly important priority in recent years. UBE is continually enhancing and expanding its support for employees in this area through mental health care measures on four levels: self care, line care, care by health management staff, and care by medical institutions outside of the UBE Group.

Since October 2003, it has provided mental health lecture to strengthen self care and line care. In fiscal 2005, 1,531 general employees and 161 managers participated in these programs.

Almost all UBE employees have now completed their lecture. UBE will continue to provide lecture to meet employee needs at each level of seniority, including courses for new employees and new managers. Care by health management staff is provided through an expanded organization that now includes industrial physicians, health nurses and industrial counselors. If necessary, based on interviews and other procedures, these professionals will refer employees for treatment at outside medical institutions.

## Measures Concerning Asbestos-Related Health Conditions

Asbestos-related health damage has become a major social problem and was the focus of intense public scrutiny in 2005. Asbestos was widely used in industry because of its excellent thermal and electrical insulating properties and resistance to wear and corrosion. However, the harmful effects of this material became apparent in recent years, and its use has been totally prohibited since October 2004.

Within the UBE Group, Ube Board Co., Ltd. once used asbestos in the production of building materials. Asbestos was also used for various other purposes, such as thermal insulation for high-temperature equipment in factories and vessels, packing around joints in pipes, and brake linings for mechanical equipment. While these uses complied with the law as it existed at the time, it was subsequently discovered that former employees had suffered health problems.

As of 2006, the entire UBE Group is working with determination to resolve the resulting health issues and facility-related problems.

### Asbestos Project

In July 2005, UBE established the Asbestos Project as a framework for efforts by the entire UBE Group to deal with asbestos-related problems. The first priority under this was to ascertain the situation through a group-wide investigation of asbestos use, and a questionnaire survey of former employees concerning their use of asbestos.

Based on analyses of these findings, the UBE Group is implementing coordinated measures in response to health issues and facility-related problems. Continuing activities in these areas will result in the formation of a structure to support ongoing action against asbestos-related problems.

### Facility-related Measures

The UBE Group has conducted a comprehensive survey of its buildings and facilities and taken appropriate action, such as enclosure or removal, in respect of any facilities in which there was a high risk of asbestos dispersion. These measures were implemented in accordance with the relevant laws and regulations and voluntary standards established by UBE. Even asbestos materials that have been found to be safe at present will be systematically removed and replaced over the next few years to prevent the risk of future dispersion.

To ensure safety until that time, the facilities concerned will be regularly monitored using environmental measurement and other methods to prevent asbestos dispersion into the environment and the exposure of personnel. There will be additional surveys concerning the use and economic life of facilities containing less hazardous materials, such as slate, and these materials will also be progressively replaced.



Removing asbestos



CT scanning (Ube Industries Central Hospital)

### Responding to Health Problems

Because symptoms of asbestos-related health damage take many years to emerge, the majority of cases are discovered after the affected workers have retired. Since 2005 UBE has surveyed former employees who were involved in the purchase and use of asbestos-related products at the Ube Chemical Factory and other facilities. Results obtained as of June 2006 show that five workers have died and three are receiving treatment for health problems. These people have been registered or have applied for registration under laws concerning relief for industrial accidents or asbestos-related health damage.

As of June 30, 2006, there had been 10 fatalities among former employees of Ube Board Co., Ltd., which previously used asbestos as a raw material. Another five people are undergoing treatment for health problems. Most of these people have been registered or have applied for registration under laws concerning relief for industrial accidents or asbestos-related health damage.

The UBE Group is providing full support for these applications. No other employees have suffered health damage. Ube Board Co., Ltd. has provided briefings for residents living near its facilities. However, there have been no reports of health problems among local residents near this plant or other sites.

Health checks, including CT scans, were provided for any employees who were concerned about the possibility of asbestos-related health damage. Employees undergo chest x-rays as part of their regular health checks. Since fiscal 2006, these have been carried out using direct detection scans, which are more sensitive than the indirect detection method. In the fall of 2005, UBE conducted a survey of former employees. Any who indicated that they had used asbestos products in the past were offered the opportunity to undergo health checks, including CT scans. Any former employees who show asbestos-related symptoms, such as pleural plaque, are given assistance with applications for the issuance of health service passbooks. UBE will continue to gather up-to-date information to assist employees and former employees with health concerns.

### Message from an Employee



Planning Group Leader, Health Care & Support Center  
**Kazunori Kurosawa**

#### Asbestos Project

A year has passed since UBE launched a project to deal with asbestos-related issues. We were very shocked to learn that a number of retired workers had suffered health damage. Our work during the past year has focused on health checks for current and retired workers.

We have also helped these people to apply for registration under laws concerning relief for industrial accidents or the issuance of health service passbooks. To date approximately 600 retired workers have undergone asbestos-related health examinations. Those who have not been checked should contact us.

## Social Contribution Activities in Japan

### Regional Cooperation and Communication

The UBE Group has undertaken a range of initiatives to build understanding about its business activities. It also participates in various community activities. Dialogue with communities is seen as especially important.

#### ■ Facility Tours

Many stakeholders are welcomed to the UBE Group's factories and research facilities, including students from local schools and members of various organizations. Factories also run open days for families to give children opportunities to learn about their parents' company. The number of people visiting UBE Group factories in the Ube area has reached 4,800.



View of the UBE exclusive high way and a special large vehicle

#### ■ Responsible Care Dialogue Meetings

The Japan Responsible Care Council (JRCC) organizes responsible care community dialogue meetings, especially in areas near chemical manufacturing complexes. As a member of the Council, UBE participated in the 5th round of regional RC community dialogue in the Sakai-Senboku and Western Yamaguchi regions. At all of these meetings, UBE presented its RC activities through poster sessions.



community dialogue meetings, especially in areas near chemical manufacturing complexes. As a member of the Council, UBE participated in the 5th round of regional RC community dialogue in the Sakai-Senboku and Western Yamaguchi regions. At all of these meetings, UBE presented its RC activities through poster sessions.



(Top) An RC community dialogue meeting in the Sakai-Senboku region (bottom) An RC community dialogue meeting in Western Yamaguchi

#### ■ Chemistry Experimentation Lab

Every year, the Ube Research Laboratory and the Polymer Research Laboratory invite school children to attend chemistry experimentation programs during their summer vacations. The purpose of this activity is to help children to experience the fascinating world of chemistry by providing an easy introduction to the advanced technologies used by UBE. Participants in the Ube Research Laboratory's 17th Summer Holiday Junior Science Class had the opportunity to observe DNA strands and learn how DNA made each person unique in the world. The Polymer Research Laboratory's hosted the "Children's Summer Holiday Chemistry Experiment Show" as part of the "Chemistry Makes Our Dreams Come True" program. Participants used advanced plastics to create their own original bookmarks. Large numbers of children discovered the fun of chemical experimentation through these events.



The Polymer Research Laboratory "Dream/Chemistry-21" "Children's Summer Holiday Chemistry Experiment Show"

#### ■ Responsible Care Community Dialogue Meeting in the Ube/Onoda District

Five JRCC member companies held the third community dialogue meeting in the Ube/Onoda district. The meeting was attended by about 20 company representatives and 20 observers, including local residents and representatives of environmental NGOs, consumer organizations, government agencies and universities. This was the first meeting of its type attended by ordinary residents.

Prior to the meeting, local community associations in the area conducted a questionnaire survey on various concerns, such as odors, water pollution, toxicity and toxic chemical emissions, complaint procedures, and smokestack emissions. This questionnaire was used as the framework for free discussion on these issues.

#### Responses to a Post-meeting Questionnaire

##### NGO Comments

- I hope that companies will hold as many of these meetings as possible.
- I want companies that use chemical substances to be more aware of the environmental effects. Ordinary citizens do not know which substances are the most hazardous.
- It takes courage to speak on controversial issues. Companies and government agencies should heed these views sympathetically and accept that they are subject to assessment by the public.
- It was very interesting to hear comments from people in various situations.

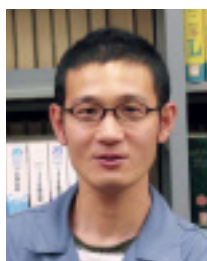
##### Third-party Comments

- It was very useful to hear the views of so many different people.



The Third Community Dialogue Meeting in Ube/Onoda district

#### Message from an Employee



Advanced Materials Research Department, Polymer Research Laboratory, Corporate Research and Development  
**Ryo Konishi**

##### Helping Children to Enjoy Science

This was the third year for the Polymer Research Laboratory to participate in the "Chemistry Makes Our Dreams Come True" program. During our experiment shows, it was very rewarding to watch the guileless enjoyment on the faces of the children, and to see from time to time flashes of intense interest in their eyes. As they left after the show, the children thanked us and told us how interesting it was.

Those words strengthened my determination to do even better next year. I look forward to more opportunities to share children's first-hand experience of the fascination of science through UBE's chemical technology.

## Forest Volunteers

UBE Group employees and their families participated in two forest protection programs in the Ube district. One was the first forest water resource development education program conducted jointly by Yamaguchi Prefecture and business corporations. The other was a forest development program for residents of fishing communities, especially those in Ube City and surrounding areas.

The joint program conducted by Yamaguchi Prefecture and business corporations focused on the maintenance of water retention capacity in the forest areas that are the source of water for the Koto River system. The Koto River is vital to the region as a source of drinking water and industrial water. Program activities included the pruning of cypress trees. The aim of this initiative is to prevent erosion and other problems.

The ultimate aim of the forest development program by fishing communities was to create healthy fishing areas. Fallen leaves from deciduous trees planted on the hills around Lake Ono help to create nutrient-rich water that flows through local rivers into the sea. Participants in the program planted large numbers of trees, including persimmon and cherry trees, as well as blueberry bushes.

Volunteers working on the first forest water resource development education program conducted jointly by Yamaguchi Prefecture and business corporations



A forest development program by fishing communities

## Other Community Cooperation Activities

UBE Group business sites sponsor and participate in local industry fairs, firework festivals and use their grounds to grow flowers.

Other initiatives in local communities include street cleaning campaigns and blood drives.



Road cleaning activities around the Sakai Factory



Volunteers donate blood in the Ube district.

## Ube Industries Central Hospital

As the main acute care facility in its region, the Ube Industries Central Hospital provides advanced emergency services on a 24-hour basis. It is also equipped with a medical check center and treatment wing to assist local residents with health management and care for chronic illnesses.

The hospital also provides a popular series of health seminars at which medical experts provide easy-to-understand answers to questions from participants.



Outside view of Ube Industries Central Hospital

### Recent Themes for Health Seminars

1. Diabetes
2. High blood pressure
3. Home-based care
4. Nutrition
5. Prenatal course for mothers
6. Postnatal course for mothers
7. Postnatal outpatients program for breast-feeding mothers (fee charged)

See further details at the hospital website

<http://www.ube-ind.co.jp/hospital/>



Learning about nutrition at a diabetes seminar

## Participation in Cultural and Artistic Activities

### ■ The UBE Foundation (Chairman: Hiroaki Tamura)

The Ube Industries Scientific Research Foundation (Chaired by Hiroaki Tamura) was originally established in 1959 as the Watanabe Memorial Science Foundation, using a bequest from the late Takaji Watanabe, the founding Chairman of UBE. Its activities include the provision of scientific research grants to young scientists and financial support for scientific research facilities. To commemorate UBE's centenary in 1997, it was renamed the UBE Foundation, and its endowment was increased. The four recipients of the 46th UBE Foundation grants in fiscal 2005 are listed below.



A presentation ceremony for research grants

#### UBE Foundation Grant Recipients

<b>Isao Sakaida</b>	Professor of Medicine, Yamaguchi University
• Research theme	Development of accelerated liver regeneration and antifibrotic therapy for the treatment of hepatic cirrhosis using autologous bone marrow cells
<b>Tetsuji Matsuo</b>	Assistant Professor, Graduate School of Engineering, Kyoto University
• Research theme	High-precision multi-scale modeling of magnetic characteristics of electrical steel sheet
<b>Keiji Tanaka</b>	Assistant Professor, Graduate School of Engineering, Kyushu University
• Research theme	Development of adhesion technology for polymer materials, with reference to nanotechnology
<b>Eiji Kinoshita</b>	Graduate School of Biomedical Sciences, Hiroshima University
• Research theme	Development of new genetic diagnosis technology for use in tailor-made medicine

### ■ Watanabe Memorial Culture Association (Chairman: Hiroaki Tamura)

Established in 1936 with a bequest from the late Yusaku Watanabe, founder of Ube Industries, the Watanabe Memorial Cultural Association supports cultural activities, including events held at the Watanabe Memorial Hall in Ube City. In February 2006, the Ube City Library established the Watanabe Memorial Culture Association Picture Book Collection with a donation from the Association. As part of its reading and writing programs, the library lends sets of picture books that can be read aloud to children in kindergartens and childcare centers in Ube City. After one month, the sets are exchanged for other books. The program uses books that have



Presenting a donation for the Picture Book Collection (Photo courtesy of UBE Nippo-sha)

been recommended as having the potential to contribute to healthy character-building. Funds donated by the Association are used by the library to purchase and manage books and operate the program.

### ■ Support for Exhibition of Contemporary Japanese Sculpture

This biennial event was first held in 1965. UBE support for the 21st exhibition in 2005 included the donation of the Ube Industries Prize, and the provision of funds to purchase the winning work. The winner of the 2005 Ube Industries Prize was "Villa Torayan" by Kenji Yanobe.



"Villa Torayan" by Kenji Yanobe, winner of the 2005 Ube Industries Prize



The 21st Contemporary Japanese Sculpture Award ceremony

### ■ External Awards

<b>April 2005</b>	Ministry of Education, Culture, Sports, Science and Technology Prize (Development Section) Winning technology: EUP Two-Stage Pressure Gasification System
<b>June 2005</b>	Japan Association for the 2005 World Exposition Global 100 Eco-Tech Award Global 100 Eco-Tech Award: EUP Two-Stage Pressure Gasification System
<b>October 2005</b>	Ministry of Economy, Trade and Industry 2005 Resource Recycling Technology/System Award (presented by the Director-General of the Industrial Science and Technology Policy and Environment Bureau) Development of Z-Sand, an artificial ground material made from coal ash
<b>February 2006</b>	15th Fujisankei Global Environment Awards, Fujisankei Group Prize Waste reutilization using chlorine by-pass facility at the Kanda Cement Factory
<b>May 2006</b>	Japan Chemical Industry Association, General Excellence Award Functional electrolyte for lithium-ion secondary batteries



UBE received a general excellence award from the Japan Chemical Industry Association (JCIA).

## Overseas Social Contribution Activities

As a globally active business group, the UBE Group works to achieve harmonious coexistence with local communities in Japan and overseas under its basic CSR policy, through social contribution activities involving all employees.

### Thailand

There are three UBE Group companies in Thailand: Thai Caprolactam Public Company Limited, Ube Nylon (Thailand) Ltd. and Thai Synthetic Rubbers Co. Ltd. Every month, these companies invite general practitioners, dentists and nurses to run temporary clinics for residents of areas around their factories. Residents receive free medical checks and advice and dental examinations. If necessary, they also receive free prescriptions to treat their medical conditions.

Every January on Children's Day, local children are invited to participate in various games and enjoy attractions. During the Thai New Year celebrations in April, UBE employees help to foster friendship by participating in local festivals.

In September and October, 80 soccer teams, including UBE teams, compete in the UBE Football Championship. These soccer matches provide opportunities for interaction with a wide range of people.

Other activities include computer classes for children, summer camps, motorcycle classes, and anti-drug campaigns.



UBE employees entertain local children at a Children's Day event.



A football match with local residents



Providing medical treatment at a temporary clinic

### Spain

The three UBE Group companies in Spain are UBE Corporation Europe S.A., UBE Chemical Europe S.A. and UBE Engineering Plastics, S.A. UBE Chemical Europe S.A. celebrated the 35th anniversary of its establishment by sponsoring a concert by the Pilsen Radio Symphony Orchestra in Castellón, where its facilities are located. It also provides continuing support for pop concerts during Castellón's annual Magdalena festival.

In the scientific realm, UBE sponsors short-term courses for science teachers working at local schools in Castellón, in partnership with the local University of Tarragona. It also supports the chemistry, physics and mathematics Olympiad in Valencia.

UBE is also actively involved in local sporting activities. During the Christmas season, it operated a temporary ice skating rink in cooperation with the City of Castellón and local businesses. In addition, it supports various local sports teams, including the "Playas de Castellón" football team, the "L'Illa-Grau" volleyball team, and the "Costa de Azahar" track and field club.



A brochure publicizing a concert sponsored by UBE



A sculpture donated by UBE to commemorate the centenary of the Port of Castellón

# Environment

The UBE Group is working to preserve the global environment through supplying safe, environment-friendly products, services and systems, through reducing levels of toxic substances and waste, and through contributing to measures to preserve global warming.

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## Responsible Care

UBE has been carrying out Responsible Care (RC)\*1 activities not just in the Chemical segment, but also in the Cement & Construction Materials segment, Machinery & Metal Products segment and the Energy & Environment Division. RC activities are also being developed throughout the Group as a whole. As a member of the Japan Responsible Care Council (Established in 1995), UBE promotes RC activities under the following six themes to protect employees, local residents and the environment, safety and health of surrounding regions.

“Responsible Care” is the title of this page and the name of one of the three categories of RC activities addressed in the subtitle of this report, “Economic, Social and Environmental Initiatives.”

### UBE Is Taking Action in Six Themes for Environment, Safety and Health

1. **Environmental Preservation** ..... Environment-friendly business activities that promote energy conservation, reduction of environment-polluting emissions and other pro-environment operations
2. **Process Safety and Disaster Prevention** ..... Carrying out safe operations and preventing facility accidents
3. **Occupational Safety and Health** ..... Protecting the safety and health of workers
4. **Product Safety** ..... Manufacturing safe products and providing proper information on correct usage
5. **Logistics Safety** ..... Implementing safe transport
6. **Publication of Performance Reports and Dialogue with Society** ..... Publishing performance reports and promoting further mutual understanding through public dialogue

#### Environment and Safety Principles

As members of society, corporations must be fully conscious of their own responsibilities regarding their contributions to society, environmental preservation and the maintenance of health and safety in performing their corporate activities.

As the core company in managing the consolidated UBE Group, UBE shall pursue the following vision in order to perform its leadership role, and shall work to improve the quality of the environment and safety among all of its Group companies through publication of performance reports and dialogue with society.

<b>Operational Safety:</b>	Ensuring operational safety shall be the priority in all areas and activities under UBE's commitment to respect human life.
<b>Process Safety:</b>	UBE shall regard maintenance of process safety as part of its basic mission as a manufacturer.
<b>Environmental Preservation:</b>	As a responsible corporate citizen, UBE shall act positively to protect and improve both community and regional conditions and to work for the preservation of the global environment.
<b>Product Safety:</b>	The UBE Group shall pursue its corporate responsibility in providing its customers and the public with safe and reliable products.
<b>Health Management:</b>	UBE recognizes that maintaining and promoting the health of its employees is the basis of corporate and social vitality.

President and Group CEO  
Ube Industries, Ltd.

*Hiroaki Tamura*  
Hiroaki Tamura

Instituted April 1992, Revised April 1996, July 1999, April 2003, July 2005



Responsible Care

### What is RC Activity?

Responsible Care (RC) is a set of voluntary initiatives based on the principles of autonomous decision-making and self-responsibility. Under RC, corporations that manufacture and/or handle chemical substances are working voluntarily to preserve health, safety and the environment in every process, from the development of chemicals through their manufacture, distribution, use and final consumption and disposal. This includes maintaining ongoing dialogues and discussions with the public by openly disclosing the results of these efforts.

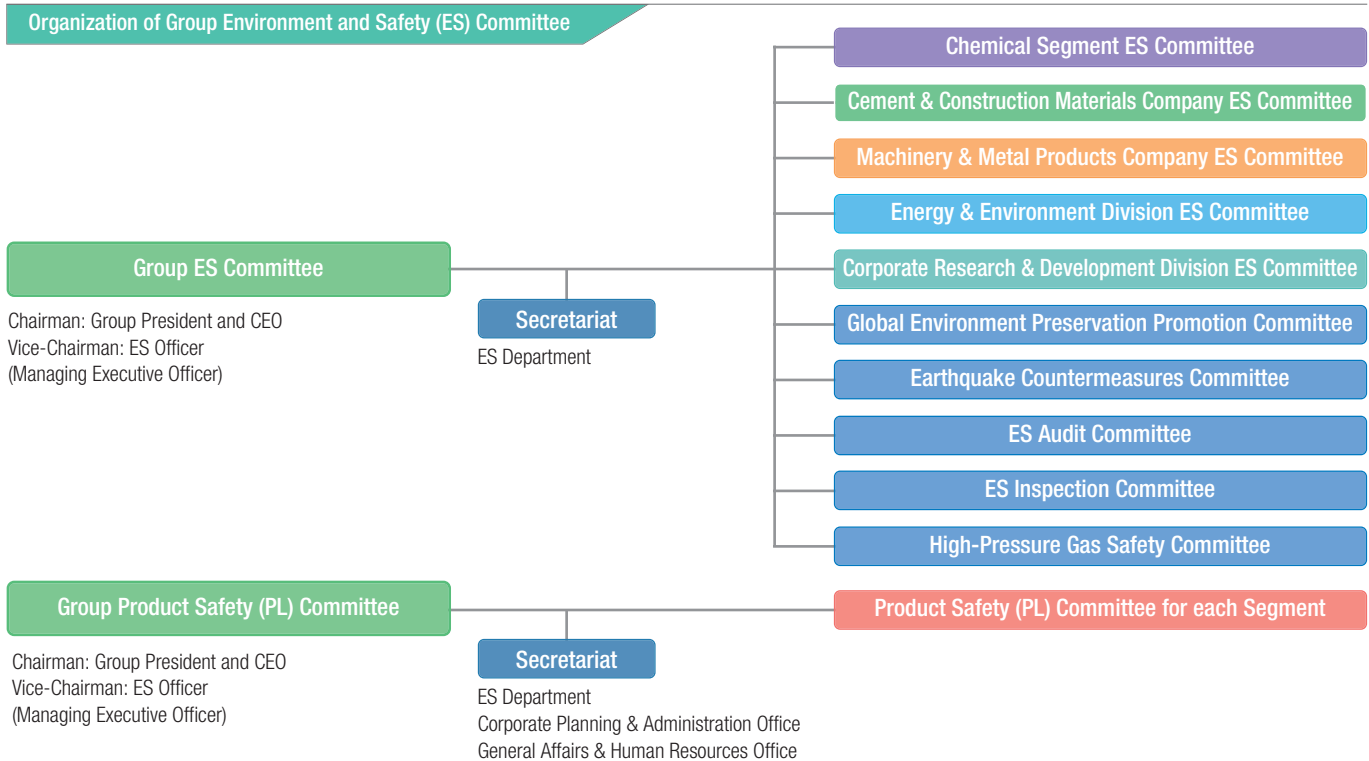


## Environment and Safety Promotion Systems

The goals identified in the UBE Group's basic philosophy on the environment and safety are work safety, facility safety, environmental safety, product safety and the maintenance and improvement of health. The supreme decision-making organizational unit in this area is the Group Environment and Safety Committee, which consists of members of the Group Management Committee and is chaired by the CEO.

This committee determines group-level policies and measures relating to the environment, safety and health.

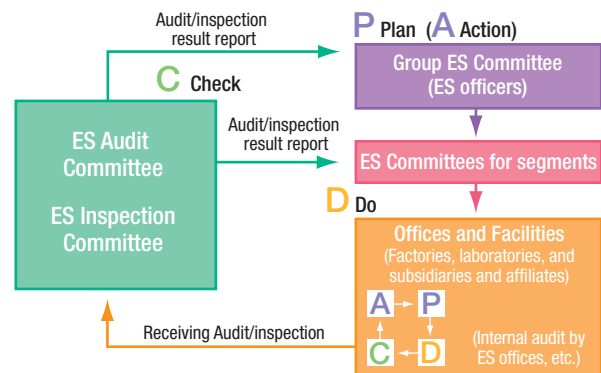
There are also committees with responsibility for five specific areas: global environmental preservation, earthquake countermeasures, auditing and inspections, and high-pressure gas safety. They discuss and review action plans and prepare reports.



## Responsible Care Management System

The UBE Group is continually improving performance relating to the environment, safety and health under a management approach based on the Plan-Do-Check-Action (PDCA) cycle. Segment Environment and Safety Committees draw up specific plans based on policies determined by the Group Environment and Safety Committee. These plans form the basis for measures implemented by individual office or facility.

Each office or facility undergoes annual environment and safety audits, while UBE Group companies are audited every two years. There are also environment and safety inspections conducted by senior management. Audits and inspections may result in the issuance of directives requiring remedial action. Findings are reported to the Group Environment and Safety Committee and segment Environment and Safety Committees.



### A Glossary

\*1 **Responsible care (RC):** This concept originated in Canada in 1985. It has been adopted by members of the International Council of Chemical Associations (ICCA), which was established in 1990 and currently (as of April 2005) has a membership of 52 countries and regions. In Japan, the Japan Responsible Care Council was created within the Japan Chemical Industry Association in 1995. Currently there are 110 member companies.

## Environment and Safety Efforts

Year	Organization & Environmental Activities (UBE)	Domestic and World Trends
1949	○ Ube System* <sup>1</sup> started	
1951	○ Dust Countermeasures Section established in Ube City	
1971	● Environment Management Section established in each factory	● Environment Agency established
1973	● Environment Management Department established in head office (currently "ES Department") ● Energy Savings Committee established	● Special Environment Preservation Law for Seto Inland Sea enacted
1992	● UBE ES Principles instituted	○ UN Conference on the Environment and Development (Earth Summit) held
1993		● Basic Environment Law enacted
1994	● Environment-related business Office started ● ES audits started	○ UN Framework Convention on Climate Change took effect
1995	● Joined Japan Responsible Care Council (JRCC), UBE's Voluntary ES Plan formulated	● JRCC established ● Container and Packaging Recycling Law enacted
1996	● UBE's ES Principles revised	
1997	○ Ube City awarded UNEP Global 500 Prize ● 1st RC report issued ● Participated in 1st RC regional meetings in Chiba, Yamaguchi, and Sakai-Senboku (every two years thereafter)	○ 3rd Convention on Climate Change (COP3) held (Kyoto Protocol adopted)
1998	● Personal Action Guidelines instituted	● Law Concerning the Promotion of the Measures to Cope with Global Warming enacted
1999	● Isa Cement Factory received ISO 14001 certification. Subsequently, all plants awarded ISO 14001 certifications	● Chemical Substance Management Promotion Law (PRTR Law) enacted ● Law Concerning Special Measures Against Dioxins enacted
2000	● RC Report (environment accounting introduced, issued every year thereafter)	● Basic Law to Promote the Formation of a Recycling-Conscious Society enacted
2001	● Global Warming Prevention Promotion Committee formed	● Environment Agency restructured into the Ministry of the Environment ● Law for the Recycling of Specified Kinds of Home Appliances enacted
2002		● Kyoto Protocol ratified ● Soil Pollution Prevention Law enacted
2003	● Personal Action Guidelines revised	● Summary of FY2002 PRTR statistics published
2004	● Participated in the 1st RC community dialogue in Ube/Onoda area ● Establishment of environment and safety inspection system for overseas sites	● Law Concerning the Evaluation of Chemical Substances and Regulation of their Manufacture, etc. (Chemical Substances Control Law) enacted
2005	● "RC Report" restructured as "CSR Report" ● High-pressure Gas Safety Committee established ● Asbestos project launched	○ Kyoto Protocol in force ● Regulations concerning prevention of asbestos-related disease enforced
2006	● Personal Action Guidelines revised	



\*1 **Ube System:** This is the common name for a system that was independently established by Ube City as a measure to prevent environmental pollution, whereby the public, academic specialists, administrative agencies and companies have cooperated in carrying out voluntary activities on the basis of information disclosure. While the Ube System already has a history of more than 50 years, new viewpoints are still being incorporated in addressing environmental and safety issues.

## ISO Certification and Other Approvals

The UBE Group energetically acquires ISO 14001, ISO 9000-series and OHSAS-18001 certifications, which represent international standards of environmental management, quality management and occupational safety and health management. In the high-pressure gas, boiler and other fields, UBE has obtained certification for its inspectors and promotes voluntary safety standards.

### ISO 14001 (Environment Management Systems) Certification

Certification Year	Ube Industries	Group Companies
1998		● Fukushima Ltd.
1999	<ul style="list-style-type: none"> <li>● Cement Production Department</li> <li>● Isa Cement Factory</li> <li>● Ube Cement Factory</li> <li>● Kanda Cement Factory</li> <li>● Chiba Petrochemical Factory</li> <li>● Corporate Research and Development Division Polymer Research Laboratories (Chiba, Ube) Ube Research Laboratory</li> </ul>	<ul style="list-style-type: none"> <li>● Ube-Mitsubishi Cement Research Institute Corporation, Ube Center</li> <li>● UBE Scientific Analysis Center</li> <li>● Ube Machinery Co., Ltd.</li> </ul>
2000	<ul style="list-style-type: none"> <li>● Sakai Factory</li> <li>● Ube Chemical Factory</li> <li>● Coal Business Unit</li> <li>● Power Business Unit</li> <li>● Ube Aluminum Wheel Factory (formerly U-Mold Co., Ltd.)</li> </ul>	<ul style="list-style-type: none"> <li>● Ems-Ube, Ltd.</li> <li>● UMG ABS, Ltd. (formerly Ube Cycon, Ltd.)</li> <li>● Thai Synthetic Rubbers, Co., Ltd. (Thailand)</li> <li>● Ryukyu Cement Co., Ltd. (Yabe Plant)</li> </ul>
2001	<ul style="list-style-type: none"> <li>● Environment Business Division</li> <li>● Nishioki Factory</li> </ul>	<ul style="list-style-type: none"> <li>● Ube Ammonia Industry, Ltd.</li> <li>● T&amp;U Electronics Co., Ltd.</li> <li>● Jade Fine Chemicals (Wuxi) Co., Ltd. (China)</li> <li>● Kemira-Ube Co., Ltd.</li> <li>● Ube-Nitto Kasei Co., Ltd.</li> </ul>
2002		<ul style="list-style-type: none"> <li>● Thai Caprolactam Public Co., Ltd. (Thailand)</li> <li>● Meiwa Kasei Industries, Ltd.</li> </ul>
2003		● Ube Automotive North America, Samia Plant, Inc.
2004		<ul style="list-style-type: none"> <li>● Hagimori Industries, Ltd.</li> <li>● Ube Materials Industries, Ltd.</li> <li>● Ube Film, Ltd.</li> <li>● Ube Nylon (Thailand), Ltd. (Thailand)</li> </ul>
2005		<ul style="list-style-type: none"> <li>● Ube Steel Co., Ltd.</li> <li>● UEL</li> </ul>

Where a group company has multiple plants, the year in which certification was first obtained is shown.

### Occupational Safety and Health Management Certification

Certification Year	Ube Industries	Group Companies
2000		● Fukushima Ltd.
2002		<ul style="list-style-type: none"> <li>● Thai Synthetic Rubbers, Co., Ltd. (Thailand)</li> <li>● Thai Caprolactam Public Co., Ltd. (Thailand)</li> </ul>
2003		● UMG ABS, Ltd.
2004		● Ube Ammonia Industry, Ltd.
2005	<ul style="list-style-type: none"> <li>● Ube Aluminum Wheel Factory</li> <li>● Sakai Factory</li> <li>● Ube Cement Factory</li> <li>● Nishioki Factory</li> <li>● Isa Cement Factory</li> <li>● Kanda Cement Factory</li> </ul>	<ul style="list-style-type: none"> <li>● Hagimori Industries, Ltd.</li> <li>● Ube Machinery Co., Ltd.</li> </ul>
2006	<ul style="list-style-type: none"> <li>● Ube Chemical Factory</li> <li>● Chiba Petrochemical Factory</li> </ul>	<ul style="list-style-type: none"> <li>● Ube Maintenance</li> <li>● Ube Nylon (Thailand), Ltd. (Thailand)</li> <li>● Ube-Nitto Kasei Co., Ltd.</li> <li>● T&amp;U Electronics Co., Ltd.</li> </ul>

### ISO 9000-series (Quality Management System) Certification

Certification Year	Ube Industries	Group Companies
1992		● UMG ABS, Ltd. (formerly Ube Cycon, Ltd.)
1994	● Ube Chemical Factory	
1995	<ul style="list-style-type: none"> <li>● Chiba Petrochemical Factory</li> <li>● Isa Cement Factory</li> </ul>	
1996	<ul style="list-style-type: none"> <li>● Kanda Cement Factory</li> <li>● Sakai Factory</li> </ul>	● Ube Machinery Co., Ltd.
1997	● Ube Cement Factory	<ul style="list-style-type: none"> <li>● Ube Machinery Inc. (U.S.A.)</li> <li>● Fukushima Ltd.</li> </ul>
1998	● Ube Aluminum Wheel Factory (formerly U-Mold Co., Ltd.)	
1999		<ul style="list-style-type: none"> <li>● Ube Information Systems Inc.</li> <li>● Ube-Nitto Kasei Co., Ltd.</li> <li>● Meiwa Kasei Industries, Ltd.</li> <li>● Ube Chemical Europe, S.A. (Spain)</li> <li>● Ryukyu Cement Co., Ltd. (Yabe Plant)</li> <li>● Ube Steel Co., Ltd.</li> </ul>
2000	● Nishioki Factory	<ul style="list-style-type: none"> <li>● UEL (formerly Ube Electronics, Ltd.)</li> <li>● Yamaishi Metal Co., Ltd.</li> </ul>
2001		<ul style="list-style-type: none"> <li>● Ube Industries Consulting, Ltd.</li> <li>● Kanto Ube Concrete Co., Ltd.</li> <li>● Ube Materials Industries, Ltd.</li> <li>● Ube Scientific Analysis Center</li> <li>● Kemira-Ube Co., Ltd.</li> <li>● Jade Fine Chemicals (Wuxi) Co., Ltd. (China)</li> </ul>
2002		<ul style="list-style-type: none"> <li>● Hagimori Industries, Ltd.</li> <li>● Ube Ammonia Industry, Ltd.</li> <li>● Ube Shipping and Logistics, Ltd.</li> <li>● Ube Automotive North America, Samia Plant, Inc.</li> <li>● Ube Techno Eng. Co., Ltd.</li> <li>● Thai Caprolactam Public Co., Ltd. (Thailand)</li> <li>● Thai Synthetic Rubbers, Co., Ltd. (Thailand)</li> </ul>
2003		<ul style="list-style-type: none"> <li>● Ube Nylon (Thailand), Ltd. (Thailand)</li> <li>● Ube Board Co., Ltd.</li> </ul>
2004		<ul style="list-style-type: none"> <li>● T&amp;U Electronics Co., Ltd.</li> <li>● Ube Electronics (Philis.) Inc. (Philippines)</li> </ul>
2005		<ul style="list-style-type: none"> <li>● Ube Maintenance</li> <li>● Ube Electronics (Wuxi) Co., Ltd.</li> <li>● Ube Engineering Plastic SA (Spain)</li> <li>● Ube Medical Co., Ltd.</li> </ul>

Where a group company has multiple plants, the year in which certification was first obtained is shown.

### Certification of Workers Engaged in High-Pressure Gas Safety and Completion Inspections

Type of Certification	Plant	Certification Date
Certification of workers engaged in high-pressure gas safety and completion inspections (high pressure gas safety law)	● Nishioki Factory	1997
	● Sakai Factory	1999
	● Chiba Petrochemical Factory	2003
Certification of workers engaged in operating inspections of boilers and Class 1 pressure vessels (Industrial Safety and Health Law)	● Nishioki Factory	1997
	● Chiba Petrochemical Factory	1997
	● Sakai Factory	1998

High-Pressure Gas Safety & Total Inspection Certified Inspector (high-pressure gas safety law)

**Total Inspection Certified Inspector:** Inspection of modifications to high-pressure gas equipment by the Prefectural Governor (completed inspection), with certification of full self-inspection qualifications conferred by the Minister of Economy, Trade and Industry upon an individual of the Company.

**Operating Inspection:** Involves the inspection of boiler operation and valve status by the Director of Labor Standards of the local Labor Jurisdiction Office. This system was designed to allow for inspections during operations.

## The UBE Group is promoting its Responsible Care activities

Responsible Care Code	Target Fiscal 2005	Planning and Policy in Fiscal 2005
Common Items	<ul style="list-style-type: none"> <li>• Medium-term RC policy (Fiscal 2004–2006) “Environment-focused Management”</li> <li>• RC Medium-term targets (FY2004–2006): “Carrying out enhancement of sustainable environment, safety and health quality plans”</li> </ul>	<ol style="list-style-type: none"> <li>1. Safety and health — Obtaining of OSHMS certification at all sites (to be completed by the end of fiscal 2006)</li> <li>2. Health management — Enhancement of health management systems</li> <li>3. Process safety and disaster prevention — Enhancement of facility risk management and consolidation of compliance</li> <li>4. Environmental preservation — Systematic and sustained improvement in environmental performance, promotion of information disclosure and community dialogue</li> <li>5. Product safety — (1) Reinforcement of systems relating to European regulations for registration, evaluation, and authorization of chemicals (REACH), (2) Enhancement of MSDS and labeling, (3) Prevention of quality complaints</li> </ol>
Management Systems		<ol style="list-style-type: none"> <li>1. Promotion of compliance activities</li> <li>2. Improvement of high-pressure gas safety promotion systems</li> <li>3. Continued updating of rules and standards</li> <li>4. Provision of corporate accident data on internal intranet</li> <li>5. Continued implementation of environmental and safety audits in Japan</li> <li>6. Meetings of Environment and Safety Committee and Product Safety (PL) Committee</li> </ol>
Environmental Preservation	<ul style="list-style-type: none"> <li>• Reducing output of substances that negatively impact on the environment</li> </ul>	<ol style="list-style-type: none"> <li>1. Further improvement in environmental performance</li> <li>2. Promotion of global warming prevention measures (including distribution division)</li> <li>3. Reduction of environmental complaints</li> </ol>
Process Safety and Disaster Prevention	<ul style="list-style-type: none"> <li>• Elimination of facility accident</li> </ul>	<ol style="list-style-type: none"> <li>1. Thorough facility management — Designed-in safety measures, full inspection of non-code facilities</li> <li>2. Reinforcement of high-pressure gas facility safety inspection system</li> </ol>
Occupational Safety and Health	<ul style="list-style-type: none"> <li>• Reduction of industrial accidents</li> </ul>	<p><b>Health management</b></p> <ol style="list-style-type: none"> <li>1. Developing comfortable working environments</li> </ol> <p><b>Safety and health</b></p> <ol style="list-style-type: none"> <li>1. Pursuit of OSHMS certification</li> <li>2. Confirmation of suppliers' safety management systems and safety activities, provision of guidance</li> <li>3. Active use of safety posters</li> <li>4. Effective use of occupational accident information</li> <li>5. Implementation of workplace safety surveys</li> </ol>
Distribution Safety	<ul style="list-style-type: none"> <li>• Container yellow card introduction ratio: 80%</li> </ul>	<ol style="list-style-type: none"> <li>1. Achievement of targets</li> <li>2. Updating of distribution safety management guidelines</li> <li>3. Regional distribution council meetings</li> <li>4. Measures to prevent distribution-related complaints and improve distribution quality</li> </ol>
Chemicals and Product Safety	<ul style="list-style-type: none"> <li>• Improvement of chemical safety management and preclusion of quality-related complaints</li> </ul>	<ol style="list-style-type: none"> <li>1. Reinforcement of response to European chemical regulations</li> <li>2. Improvement of MSDS and labeling</li> <li>3. Thorough examination of past quality issues and countermeasures</li> <li>4. Promotion of chemical product safety evaluation</li> <li>5. External publication of MSDS</li> </ol>
Dialogue with Communities	<ul style="list-style-type: none"> <li>• Promotion of dialogue with communities</li> <li>• Information disclosure, and improvement of transparency</li> </ul>	<ol style="list-style-type: none"> <li>1. Implementation of RC dialogue</li> <li>2. Fulfillment of RC Report</li> </ol>

Fiscal 2005 Activity Report

	Evaluation	Pages included
Priority items were generally implemented and completed according to plan.		
• Starting in fiscal 2005, publication of a CSR Report, including CSR information and CSR promotion systems have been announced.		4, 5
• Basic policies were included in the CSR Report, and in-house RC briefings were held. A PDF version of the CSR Report was provided on the external website, and details of RC activities were widely publicized through RC community dialogue meetings and other methods.		4
• An earthquake response manual was compiled for the Tokyo head office, and earthquake response manuals for two sites were reviewed.		18
• CSR Report 05 was inspected and verified by JRCC.		
1. "Our Personal Action Guidelines" revised		12, 24
2. High-Pressure Gas Safety Committee established, meetings held		23
3. Basic environment and safety principles, environment and safety management regulations, chemical product safety management regulations and High-Pressure Gas Safety Committee regulations revised or compiled		22
4. Occupational accident information and other resources expanded and revised to improve accessibility		
5. Environment and safety audits conducted at 10 sites and 7 group companies in Japan		40
6. Both committees held twice during the year with participation of senior management		23
1-1 Establishment of reduction targets for toxic chemicals, PRTR and VOC substances, follow-up measures		32, 33
1-2 Cement segment: continuing achievement of zero-emission		35
1-3 Reduction of waste volumes sent to company-managed disposal sites		
2-1 Appropriate action in response to amendments to the Energy Conservation Law and Global Warming Countermeasures Law, and the introduction of environmental tax		30
2-1 Collection of information and monitoring of trends concerning emission rights trading, CDM/JI, etc.		
2-2 Modal shift and support for CO <sub>2</sub> reduction in distribution sector		30
2-3 Implementation of "Cool Biz" and "Warm Biz" measures		31
3. Installation of odor monitoring equipment, initiation of monitoring system		
1. Could not be implemented in fiscal 2005 — Corporate measures in fiscal 2006 to include full inspection of facilities focusing on explosion, fire and leak risks		
2. Applications filed for two sites (Sakai, Nishioki) under the amended High-Pressure Gas Safety Law, inspection and management organization audited by head office (Sakai)		23
1. Progress toward full smoker segregation in workplaces (Ube, Tokyo)		16
2. Continued implementation of seniority-based mental health training, improvement of individual guidance (Tokyo head office)		16
3. Continued implementation of environmental monitoring at business sites		
1-1 Monitoring of progress at individual sites through audits and inspections, implemented at all parent company sites		40
1-2 Obtaining of OSHMS certification at eight out of 12 sites		25
2. Training programs implemented, including training for new employees, new executives and internal audit staff		14
3. Continued use of safety posters		38
4. Analysis of UBE Group occupational accidents, distribution of findings		38
5. Implementation of workplace survey on safety		
1. Transportation of products covered by JCIA standards reduced by 90%		37
2. Distribution safety management guidelines updated		
3. Holding of distribution council meetings held in various locations		37
4. Measures taken to prevent distribution-related complaints and enhance distribution quality		
1-1 Responding to RoHS directive — Continuing surveys of substances contained in purchased raw materials and packaging materials		37
1-2 Responding to REACH Bill — Surveys of products for export to Europe and products manufactured and sourced within Europe completed		
2-1 Continued updating and appropriate operation of MSDS based on integrated group format (245 products revised)		37
2-2 Appropriate operations under new labeling management system (based on new guidelines, in operation)		
3. Group-level inspections		
4-1 Participation in Japan Challenge Program for Japanese version of HPV system (full entries completed for two substances)		37
4-2 Evaluation of ICCA-HPV substances (supplementary work completed for sodium nitrite)		37
5. MSDS information for key chemical products posted on external website		37
1-1 Third community dialogue meeting held on (February 4, 2006) — Participants: 24 representatives of local community associations and NGOs on behalf of residents, 5 member companies of JRCC		18
1-2 Participation in RC regional dialogue meetings in Western Yamaguchi (November 19, 2005) and Sakai-Senboku (March 7, 2006)		18
2-1 RC Report revised and published as CSR Report (Japanese and English versions)		24
2-2 CSR Report verified		
2-3 Holding of Internal briefings on CSR Report held at Chiba, Tokyo, Sakai and Ube — two-way communication achieved		

## Environmental Accounting

Since fiscal 1999, the UBE Group has introduced environmental accounting as a tool for quantitatively understanding and evaluating the costs and effects of environmental preservation in the Group business activities and promoting more efficient sustained environmental preservation. The results for fiscal 2005 are as shown in the following tables.

### Environmental Preservation Costs

Capital investment decreased by ¥280 million compared with the fiscal 2004 level to ¥2,830 million. The main reason for the reduction was the completion of investment in upstream and downstream facilities.

Costs increased by ¥1,360 million over fiscal 2004 to ¥9,000 mil-

lion, mainly due to higher pollution prevention costs, including PCB treatment costs, and a rise in resource recycling costs due to efforts to use wastes effectively.

#### Environmental Preservation Cost

(Unit: ¥100 million)

Cost Category	Main Activity	Capital Investment			Cost		
		FY2004	FY2005	Difference	FY2004	FY2005	Difference
Cost by business area	Pollution prevention	9.3	9.9	0.6	43.7	53.3	9.6
	Global environment preservation	2.2	4.4	2.2	1.1	1.9	0.8
	Resource recycling	13.8	13.7	-0.1	11.6	16.3	4.7
Upstream/downstream costs		5.8	0.0	-5.8	5.8	6.7	0.9
Costs of management activities		0.0	0.1	0.1	4.7	4.4	-0.3
Research and development costs		0.1	0.0	-0.1	3.4	2.0	-1.4
Costs of social activities		0.1	0.2	0.1	2.3	2.6	0.3
Costs of cleaning up environmental damage		0.0	0.0	0.0	3.8	2.8	-1.0
Total		31.1	28.3	-2.8	76.4	90.0	13.6

### Economic Effect

The income effect was ¥150 million. This figure includes proceeds from the sale of marketable wastes. The saving effect was ¥5,330 million.

Contributing factors included resource recycling and efforts to promote energy conservation.

#### Economic Effect

(Unit: ¥100 million)

Cost Category	Main Activity	FY2004	FY2005	Difference
Income effect	Revenues from acceptance of industrial waste*	1.0	1.5	0.5
	Proceeds from sales of marketable waste products	(64.5)	(77.2)	(12.7)
Savings effect	Savings achieved through resource recycling and energy conservation	42.4	53.3	10.9

\* Sales by resource recycling businesses (revenues from the acceptance of industrial waste as fuel and raw materials for cement production) have been excluded. The figure in parentheses represents the total if these are included.

### UBE Group Environmental Accounting Method

- Reporting period: Fiscal 2005 (April 2005–March 2006)
- Companies covered: UBE Group 11 companies (see “Scope of this report”) (Page 53)
- Calculations are based on the “Environmental Accounting Guidelines (FY2005 version)” of the Ministry of the Environment.
- The economic effect is the effect obtained in fiscal 2005 as a result of environmental protection activities. This is limited to what can be calculated rationally, and excludes hypothetical calculations such as the avoidance of the cost of cleaning up environmental damage.
- Internal transactions within the UBE Group are not included.

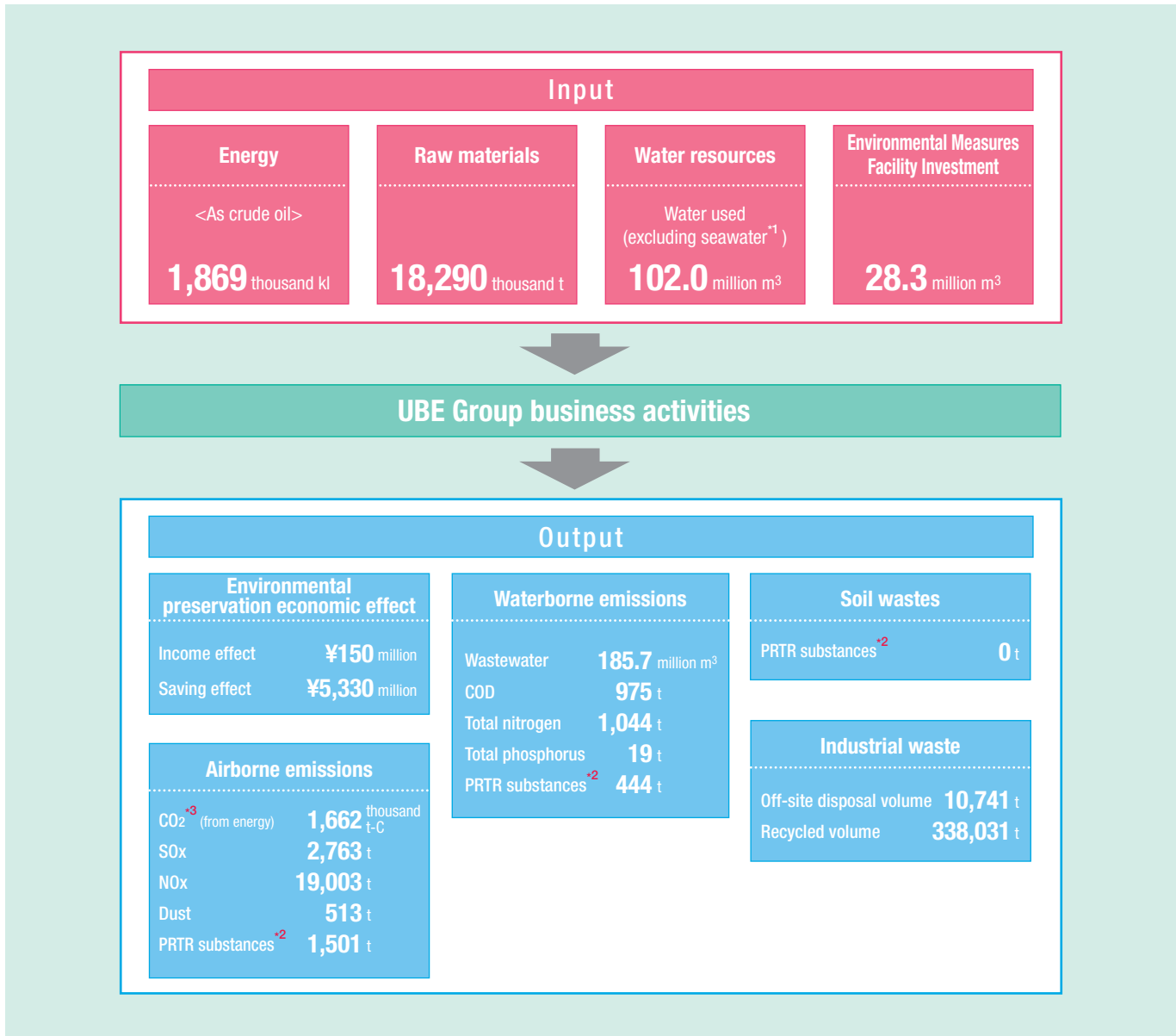
# Environmental Preservation Activities

## Environmental Performance

The UBE Group has developed a broad range of business operations, including Chemicals & Plastics, Specialty Chemicals & Products, Cement & Construction Materials, Machinery & Metal Products and Energy & Environment.

The Group recognizes that environment-friendly management is a vital issue for continuing to survive and grow in the 21st century. "Environmentally oriented business practices" is one of the basic policies advocated by the New 21•UBE Plan II, the Group's 3-year,

mid-term business plan, for which 2004 is the first year and which focuses on "Speed and Trust" as a key term. In the future, the Group will promote business activities that contribute to the formation of a recycling-conscious society by promoting measures to prevent global warming, reducing noxious air pollutants, cutting industrial wastes, and using wastes and resources effectively. At the same time, we will contribute to the formation of a sustainable society through our products and services.



Note: See Page 53 for details on the scope of performance data for the UBE Group.

### A Glossary

- \*1 The difference between the amounts of water usage and wastewater is due to inclusion of seawater in the wastewater volume.
- \*2 PRTR figures are based on amounts of 480 substances regulated by the JCIA (see Page 33 for reference).
- \*3 Only CO<sub>2</sub> from energy sources is stated.

## Environmental Preservation Activities

The UBE Group has reduced its CO<sub>2</sub> emissions by over 9% from the fiscal 1990 level and is working to achieve further improvements in energy consumption per unit of production.

### Global Warming Prevention Measures (Energy Use Volume and CO<sub>2</sub> Emission Volume)

Under the Kyoto Protocol, which came into effect in February 2005, Japan is obligated to reduce its average output of greenhouse gases between 2008 and 2012 by 6% relative to the base year (1990). This will require a reduction of at least 14% from the present level.

In fiscal 2000, the UBE Group has responded to this situation by formulating its Medium/Long-Term Global Warming Prevention Strategy, which calls for a reduction of at least 6% in its CO<sub>2</sub> emissions by 2010. Since fiscal 2001, the Global Environment Preservation Promotion Committee has been coordinating the implementation of reduction and monitoring measures.

In July 2005, the Global Environment Preservation Promotion Committee held a special meeting that resulted in the establishment of the Distribution Working Group. This move was prompted by the need to

meet shipper liabilities under the amended Energy Conservation Law from 2006 onwards.

Efforts to reduce CO<sub>2</sub> emissions continued in fiscal 2005. Measures included the diversification of fuel sources to include the use of biomass and other types of waste. The UBE Group aims to improve its energy efficiency at the rate of at least 1% per year and is also working to exceed the industry targets stipulated in the voluntary action program of the Nippon Keidanren (Japan Business Federation), as shown in the following table.

Though its current CO<sub>2</sub> emissions already meet the target reduction of at least 6%, the UBE Group does not see this as a reason for complacency. The Group is currently carrying out studies in preparation for the adoption of an even more ambitious target.

#### UBE Group Comprehensive Targets

Targeting a comprehensive reduction of CO<sub>2</sub> emissions to more than 6% of fiscal 1990 levels by fiscal 2010

#### Targets of voluntary action plan by segment and industry

- Chemical/Japan Chemical Industry Association: **10% reduction in Unit Energy Consumption by fiscal 2010** (fiscal 1990 basis/fiscal 2010 target)
- Cement & Construction Materials/Cement Association: **3% reduction in Unit Energy Consumption by fiscal 2010** (fiscal 1990 basis/fiscal 2010 target)
- Machinery & Metal Products/Japan Industrial Machine Association Target: **1% per year reduction in Unit Energy Consumption by fiscal 2010** (fiscal 1990 basis/fiscal 2010 target)

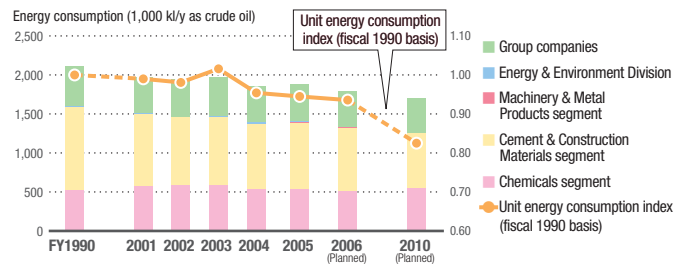
\*We are working toward targets formerly set for Machinery & Metal Products.

### Energy Consumption and Energy Efficiency

Energy consumption continued to decline until fiscal 2004, reflecting efforts over the past few years to use diversified energy sources, including wastes. In fiscal 2005, improvements in unit energy consumption were offset by production increases, with the result that total energy consumption was similar to the fiscal 2004 level. However, the continuing implementation of energy saving measures brought further improvement in energy consumption per unit of production.

In fiscal 2006, energy saving initiatives are expected to bring further improvement in energy consumption per unit of production, leading to a reduction in total energy consumption.

#### Energy Consumption and Unit Energy Consumption Index

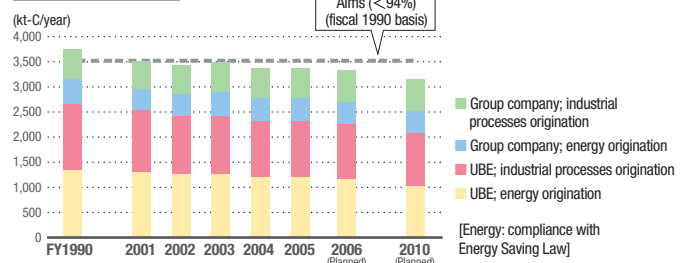


### CO<sub>2</sub> Emissions

Because energy consumption remained close to the previous year's level, the volume of CO<sub>2</sub> emissions also remained basically static. However, the result for fiscal 2005 was already more than 9% below the fiscal 1990 level.

The UBE Group will continue to target further reductions in CO<sub>2</sub> emissions in its future business activities. These efforts will focus primarily on energy saving initiatives, including the expansion of biomass use.

#### CO<sub>2</sub> emissions



Note: As noted in the definition of the scope of this report on Page 53, the organizational boundaries have been adjusted to reflect the Guidelines for Calculating Greenhouse Gas Emissions by Businesses (Ministry of the Environment, Draft Version 1.6) from fiscal 2004 onwards.



## Case Study: Reducing CO<sub>2</sub> Emissions through the Use of Biomass

In fiscal 2005, the use of wood biomass as a boiler fuel at the Isa Cement factory continued to make a significant contribution to the reduction of CO<sub>2</sub> emissions. The annual reduction is estimated to be 59,000 tons of CO<sub>2</sub>. As described in the "Topics" section, biomass fuel will also be used to replace part of the coal used in a 216 MW pulverized coal thermal power station. This initiative will reduce CO<sub>2</sub> emissions by approximately 100,000 tons annually. Efforts are also continuing at other plants, including the use of inverters on electric motors.

## Case Study: Reducing CO<sub>2</sub> Emissions through Process Changes

In the past UBE produced the refreshing marine scent for its "Heliofresh" using a substance extracted and refined from trees, including trees grown in tropical rainforests. To save trees and reduce the energy required to refine the substance, UBE developed an alternative process based on synthesis from catechol, a fine chemical that it manufactures itself. Though the quantity of beneficial greenhouse gas emissions from this change are relatively small compared with other factories' improvements, the estimated reduction in CO<sub>2</sub> emissions is nevertheless significant at around 7,000 tons annually.

## Case Study: New No-car Campaign

In the past, no-personal-car campaigns have been implemented according to schedules set by individual sites, usually once or twice each month. Some sites recorded statistics concerning these initiatives. However, there were problems with this approach. For example, some people were unable to participate on the days specified, while participants were often unable to ascertain their contribution to the prevention of global warming.

It was therefore decided to replace uniform no-personal-car campaigns with a system that allows individuals to stipulate their own no-car days. The target is to reduce car use by four one-way trips each month. The new system quantifies the reduction in CO<sub>2</sub> emissions according to the travel distance avoided and the fuel consumption of the vehicle.

### Results of No-car Campaign June 2006

About 14 tons reduction of CO<sub>2</sub>/month

Rank	Name	CO <sub>2</sub> reduction volume (kg)	Times held	No. of participants
1	Ube Chemical Factory	5,868	3,714	207
2	Sakai Factory	4,362	1,302	85
3	Ube head office	1,380	1,105	65
4	Ube Cement Factory	760	536	31
5	Ube Machinery Corporation	607	488	15
6	Polymer Research Laboratory	314	89	4
7	Kanda Cement Factory	307	324	21
8	Chiba Petrochemical Factory	267	112	10
9	Isa Cement Factory	87	112	9
Total for all companies		13,953	7,782	447

### Message from an Employee



Team Leader, Environment & Safety Team  
Planning and Coordination Group  
Production Technology Center

#### Takashi Matsunaga

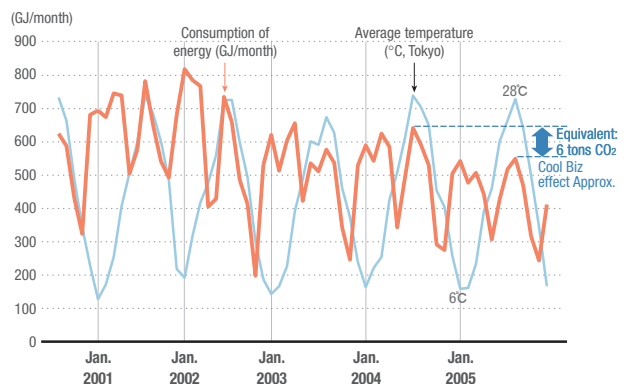
#### Participating in the No-car Campaign

When I calculate my CO<sub>2</sub> emission savings and the number of cedar trees that would have been needed to absorb them, I become even more determined to commute by bicycle, even when the weather is not good. I realize that my accumulated savings are minuscule compared with CO<sub>2</sub> emissions from generators and other facilities in the factory. However, the important thing is to share a sense of determination to reduce CO<sub>2</sub> wherever possible. I hope that more and more people will join this campaign.

## Case Study: Saving Energy at the Tokyo Head Office

For many years, UBE Group plants have worked to reduce energy consumption in plant offices as part of each plant's energy conservation program. Measures include stringent temperature control, and schemes to ensure that office lights are turned off during lunch breaks. Like the factories, head office divisions are also implementing energy saving measures, including participation in the government's voluntary "Cool Biz" and "Warm Biz" programs since fiscal 2004. Calculations based on a statistical model developed for the "Cool Biz" program recently showed that measures implemented in the Tokyo head office reduced CO<sub>2</sub> emissions by approximately six tons per month compared with levels in the summers of 2004 and 2005, when average monthly temperatures were similar. UBE plans to expand its quantitative monitoring of energy savings in offices, including branches.

### Tokyo Head Office/Energy Consumption Volume and Monthly Temperature Trends



## Case Study: Promoting Awareness of Energy Conservation in Factories

Every winter and summer, the Sakai Factory holds energy conservation seminars for its workers. These seminars provide up-to-date information on various topics, including energy conservation and global warming countermeasures.



An energy conservation seminar at the Sakai Factory

To inject fun into the learning process and attract more participants, each seminar is followed by an energy conservation quiz.

# Environment Preservation Activities

## Controlling Noxious Air Pollutants

In consideration of their usage volumes and potential harm, the chemical industry designated 12 harmful air pollutants as subject to voluntary management among a number of harmful air pollutants, and has promoted reduction of their emissions. From 1997, the industry worked on the 1st Voluntary Management Plan (fiscal 1997–1999), which used fiscal 1995 as the base year, following this up in 2001 with the 2nd Voluntary Management Plan (fiscal 2001–2003), which used fiscal 1999 as the base year, in an effort to reduce emissions still further.

Now UBE succeeded in reducing emissions of six substances by 95% (compared to 1995).

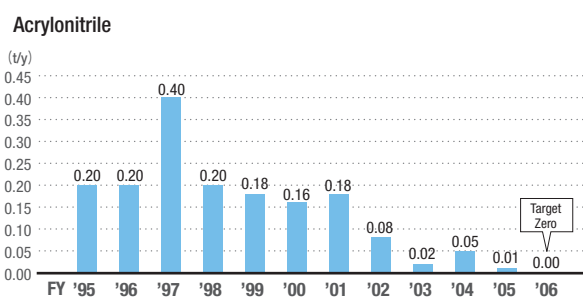
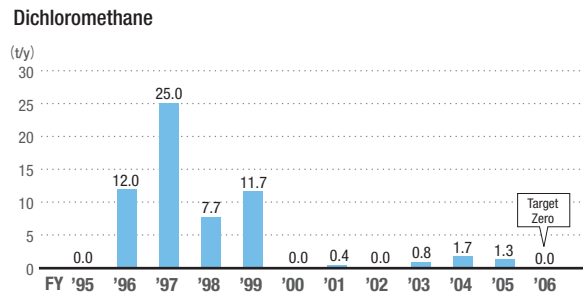
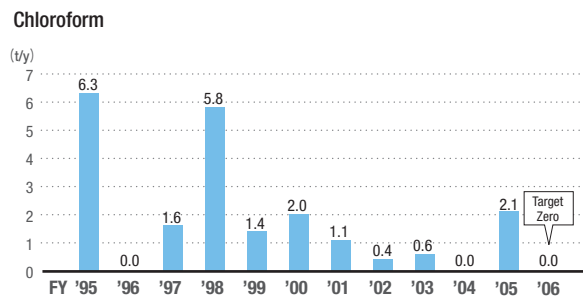
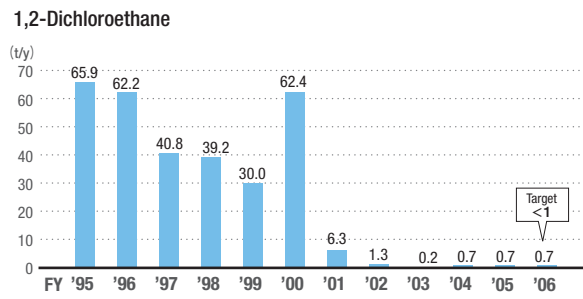
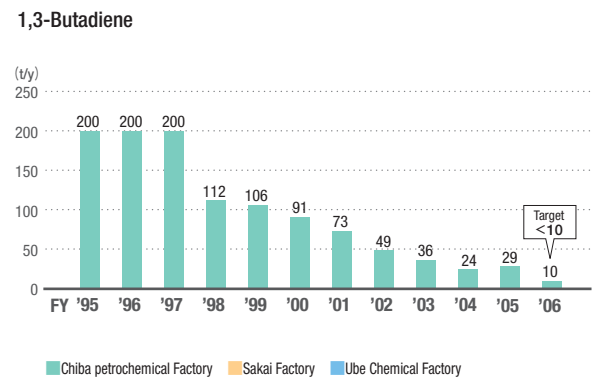
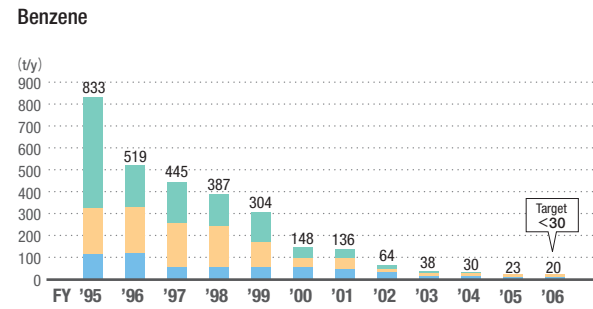
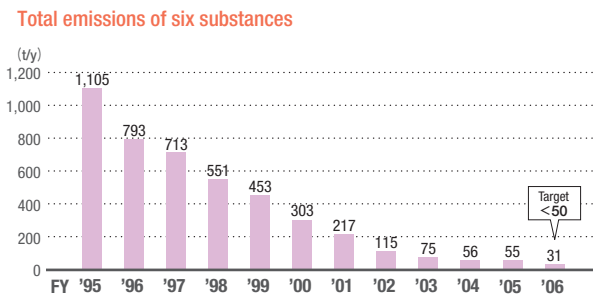
In addition to its continuing efforts to reduce emissions of the aforementioned six substances, the UBE Group is also working to curb emissions of volatile organic compounds (VOCs), which are the source of suspended particulates and photochemical oxidants. It has already adopted a plan to reduce VOCs emissions by 30% from the fiscal 2000

level by fiscal 2010. UBE uses 6 of the 12 substances subject to voluntary management, and is working to further reduce emissions of these. The 6 substances are: benzene, 1,3-butadiene and acrylonitrile, which are raw materials for synthesis, and 1,2-dichloroethane, chloroform and dichloromethane, which are solvents. Benzene is also used as a solvent. Benzene and 1,3-butadiene are particularly harmful, and UBE is doing all it can to make deep cuts in emissions of these. By 2005, emission volumes of benzene and 1,3-butadiene were reduced by 97% and 86% respectively from fiscal 1995.



A benzene recovery system

### Reduction of Airborne Chemical Emissions



## PRTR\*1 (Pollutant Release and Transfer Register) System

The UBE Group manages to reduce discharges of chemical substances from its facilities into the environment in recognizing the importance of chemical management.

In addition to 354 substances designated under the PRTR law, the chemical industry controls a total of 480 substances, which have voluntarily been added by the Japan Chemical Industries Association under Responsible Care activities. Furthermore, UBE is surveying VOC substances. Of these, 84 substances are handled by the UBE Group, and 70 by UBE. For the substances in the

PRTR list, UBE Group handles 51 substances, and UBE, 39.

Under JCIA's system, which lists more substances, total emissions decreased by 11% from fiscal 2004 despite increases in production volume and the number of VOC-related substances. For emission of each substance, we endeavored to reduce it by installing and operating the exhaust gas treatment systems and improving production processes, such as a closed system adoption and alternative solvent usage.

### UBE Group Data on PRTR Substances

(Unit: t)

	Handling Volume (Volume used/produced)	Emission into atmosphere	Emission into water	Emission into soil	Total emission	Emission ratio compared with fiscal 2004	Transfer volume*
PRTR Law basis	592,416	454.0	189.9	0.0	643.9	26%	1,105.2
JCIA basis	2,359,661	1,501.8	444.2	0.0	1,946.0	-11%	1,863.6

\* Transfer volume: volume treated externally as waste

### Individual Emission Volumes (Top 12 Substances and Dioxins)

No. shown by PRTR law	Substance	CAS No.	Handling volume (t)	Emission volume			Total (t)	Emission ratio compared with fiscal 2004	Transfers volume
				Atmosphere	Water	Soil			
227	Toluene	108-88-3	889	167.6	12.3	0.0	179.9	-15%	166.2
61	ε-Caprolactam	105-60-2	229,745	0.0	121.2	0.0	121.2	62%	96.8
102	Vinyl acetate	108-05-4	3,597	98.1	0.0	0.0	98.1	354%	0.0
**	Cyclohexanone	108-94-1	135,294	16.5	42.9	0.0	59.4	—	0.0
63	Xylene	*	172	57.5	0.0	0.0	57.5	-27%	17.1
40	Ethylbenzene	100-41-4	33	33.5	0.0	0.0	33.5	1%	0.0
268	1,3-Butadiene	106-99-0	99,268	28.8	0.0	0.0	28.8	20%	0.0
299	Benzene	71-43-2	96,384	22.6	0.6	0.0	23.2	-23%	0.0
85	Chlorodifluoromethane (HCFC-22)	75-45-6	11	11.4	0.0	0.0	11.4	-14%	0.0
224	1,3,5-Trimethylbenzene	108-67-8	9	8.0	0.0	0.0	8.0	11%	0.0
304	Boron and its compounds	*	209	0.5	6.7	0.0	7.2	6%	1.5
177	Styrene	100-42-5	244	3.0	0.0	0.0	3.0	131%	0.2
1	Water-soluble compounds of zinc	*	3	0.0	3.0	0	3.0	15%	0.0
179	Dioxins**	*	—	483	0	0	488	-52%	6

CAS No.: Chemical Abstract Service registry number

\* Includes various compounds

\*\* VOC substances

### PCB (Polychlorinated biphenyl)

The UBE Group stores, whether currently used or no longer in use, PCB-containing transformers, condensers and fluorescent lighting stabilizers in its factories properly in according to the Law Concerning Special Measures against PCB waste.

We plan, up to July 2016, to appropriately store and treat PCBs. A portion of the stored PCBs was treated at the Kita-Kyushu business office of the Japan Environmental Safety Corporation (JESCO).



A PCB storage facility

## A Glossary

\*1 **PRTR** :The PRTR system aims to track and identify the quantity of chemical substances that are discharged into the environment or transferred to an external location in the form of waste by plants and other facilities in the course of their business activities, and seeks to control and reduce the impact on the environment through the appropriate use and control of chemical substances. The contents of the register are reported to the Government and other official bodies. Based on the 1999 Law Concerning Reporting, etc., of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in their Management (also known as the Chemical Substance Management Promotion Law, or "PRTR Law"), businesses with 21 employees or more handling any of the 354 class 1 special chemical substances (one ton or more a year, or half a ton or more a year if carcinogenic) must report the amount of wastes discharged or transferred from their business premises.

# Environment Preservation Activities

## Industrial Waste Recycling in Cement Factories

《Cement Factories are the ultimate resource recycling facilities.》

Wastes can be used as an alternative to some of the raw materials for cement (material recycling) and as a fuel (as a thermal recycling) in cement making. A wide variety of wastes can be used in this way.

Ash produced by incineration can also be used as an alternative to clay, a component of cement, eliminating the need for final disposal sites for incineration ash. Another advantage is that the high calcining temperature of the cement kilns (1,450°C) burns and destroys substances that cannot be eliminated by ordinary incinerators. The kilns also offer a large waste-processing capacity. UBE's three cement factories actively accept and use various waste materials such as slag, coal ash, refuse incineration ash, sludge, waste fluids and waste plastics from UBE and companies both inside and outside the Group.

In fiscal 2005, our cement factories made effective use of around 3.4 million tons of wastes and byproducts. Of this, about 3.2 million tons was sourced from outside UBE Group. This is one way UBE contributes to the formation of a recycling-conscious society. In fiscal 2005 a high-chlorine by-pass facility became operational at the Kanda Cement Factory.

This facility allows the use of materials that were previously unsuitable for cement production because of their high chlorine content, such as incinerator ash from household waste, and sludge. As a result, the amount of waste that can be recycled has increased by approximately 80,000 tons annually.

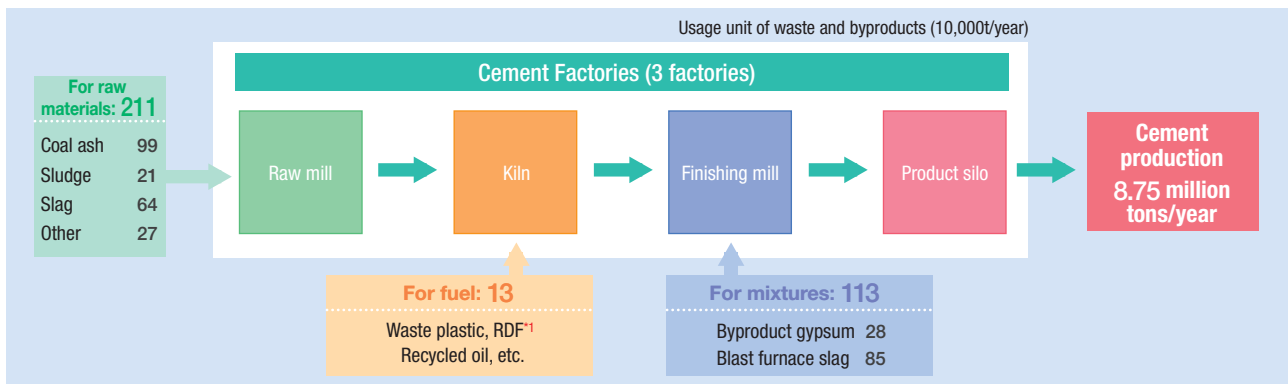
UBE will continue to expand its recycling operations.

### History of Waste Treatment Facility Installations

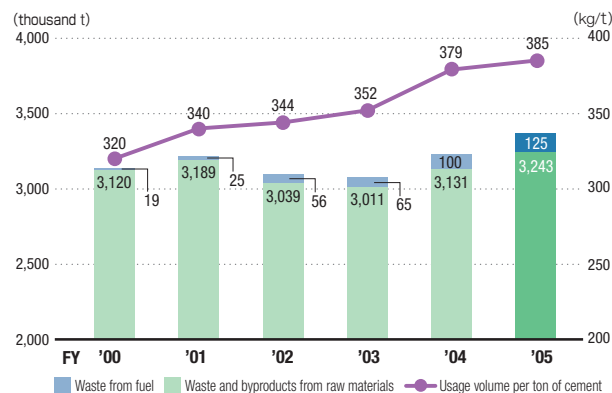
Fiscal year	For Fuel	For Raw materials
1998	Waste oil treatment facility at Kanda Factory	Chlorine bypass facility at Isa Factory
1999		Waste water receiving facility at Ube and Kanda factories
2000	Waste plastic treatment facility at Ube Factory (1st phase)	
2001		Sewage sludge treatment facility at Ube Factory
2002	Waste plastic treatment facility at Kanda Factory (1st phase)	Sewage sludge treatment facility at Isa Factory (1st phase), Chlorine bypass facility at Ube Factory, Bone meal treatment facility at Ube, Isa and Kanda factories
2003	Waste plastic treatment facility at Isa Factory (1st phase)	
2004	Woody biomass mix-burn power generation facility at Isa Factory	
2005	Waste Plastic treatment facility at Isa Factory (2nd phase)	High-chlorine bypass facility at Kanda Factory
2006	Waste Plastic treatment facility at Kanda Factory (2nd phase)	
2007	Waste Plastic treatment facility at Ube Factory (2nd phase)	Sewage sludge treatment facility at Isa Factory (2nd phase)

\*Year 2007 is Planned

### Waste and Byproduct Utilization in Cement Factories



### Waste and Byproduct Consumption Volume



### Glossary

\*1 Refuse-derived fuel (RDF): This is solid fuel made by compressing waste plastic, scrap wood and general garbage.

### Message from an Employee



General Manager, Material and Fuel Recycle Department  
Materials Recycle Division Cement & Construction Materials Company  
**Hiroshi Yoshitani**

#### Turning Waste into Cement

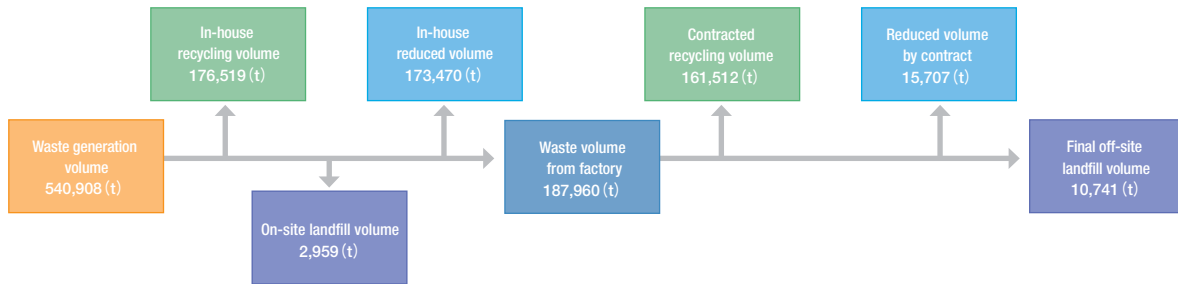
When using waste products as a raw material for cement, we must ensure that there will be no adverse effects on the local environment, on the quality of the cement, and on factory operations. We are continually developing treatment technology and expanding and improving our capacity to accept waste. The benefits gained from using these materials to make cement include lower production costs, reduced CO2 emissions, the extension of landfill life spans, and the effective use of resources. We are helping to protect the global environment while making an important contribution to the formation of a recycling-oriented society. This activity will also contribute to local communities by creating jobs and providing a reliable, long-term option for the disposal of local waste. We are determined to develop and expand this initiative.

## Industrial Waste Reduction

The entire UBE Group is working to reduce industrial waste. UBE's cement factories take in large volumes of waste from inside and outside of UBE for recycling as raw materials and fuel. In addition to this contribution

to effective utilization and recycling, the cement factories are themselves continuing zero emission status.

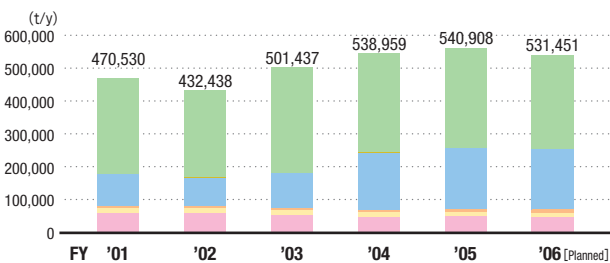
### Overall Flow of Industrial Waste



### Industrial Waste Generation Volume

Industrial waste is generated by many sources. Chemical-related factories and facilities generate sludge, waste oil and waste plastic; on-site power generating and ammonia plants generate coal ash; machinery factories generate inorganic waste, etc.

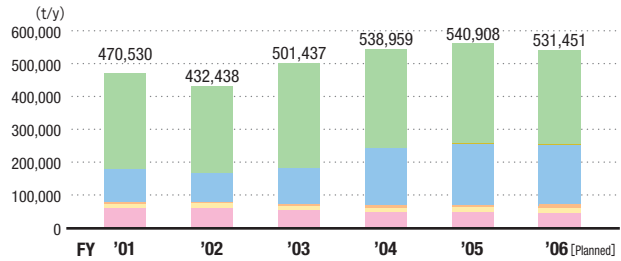
### Waste Generation Volume



### Industrial Waste Emissions from Factories

There was an increase in UBE's industrial waste emissions sent to off-site recycling, such as refractory materials. The total UBE Group output increased by 20%.

### Industrial Waste Emissions from Factories

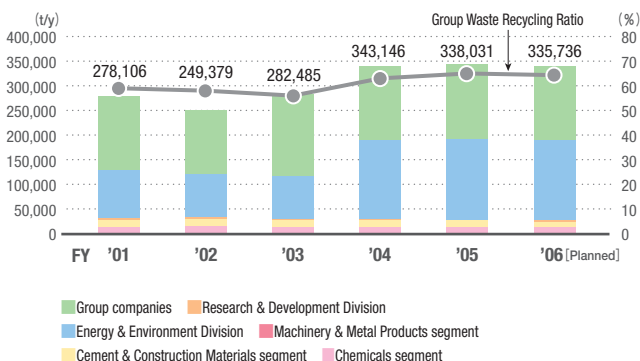


### Recycled Industrial Waste Volume

Most of the waste generated by the UBE Group is recycled within the Group, while some waste is recycled on a cooperative basis with companies outside the Group. In fiscal 2005, recycling volume and the overall recycling ratio decreased by 1% over the previous fiscal year.

The line graph below shows the recycling ratio. In fiscal 2005, the UBE Group's and UBE's recycling ratios were 63% and 75%, respectively.

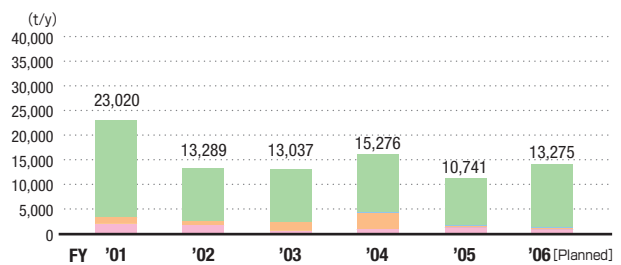
### Industrial Waste Recycling and Ratio



### Off-site Final Landfill Volume

Final off-site landfill volume decreased by 30% over fiscal 2004.

### Off-site Final Landfill Waste



### Industrial Waste Management

In compliance with the waste treatment and clean-up laws, our industrial wastes are stringently controlled to ensure they are treated and disposed of appropriately. When contracting waste treatment or disposal to outside companies, we use a waste manifest system to control transfer volumes and destinations, and the wastes are monitored until final disposal.

# Environment Preservation Activities

## Controlling Air and Water Pollution Prevention Measures

UBE has been working in cooperation with the public, academics and administrators to prevent air and water pollution since 1949, which was long before air pollution first began to attract attention as an environmental issue.

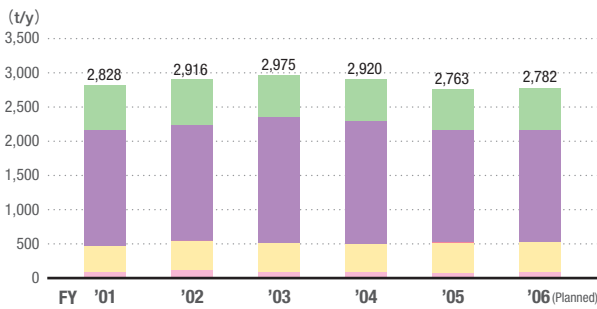
Today, desulfurization, denitrification, and dust removal processes developed by UBE are used to eliminate or reduce such health-threatening substances as sulfur oxides (SOx<sup>\*1</sup>), nitrogen oxides (NOx<sup>\*2</sup>), and dust.

In addition responding to such laws as the The 5th Provision of the Effluent Discharge Regulation<sup>\*3</sup> for enclosed sea areas like the Seto Inland Sea, the UBE Group, and in particular our chemical plants, which can have

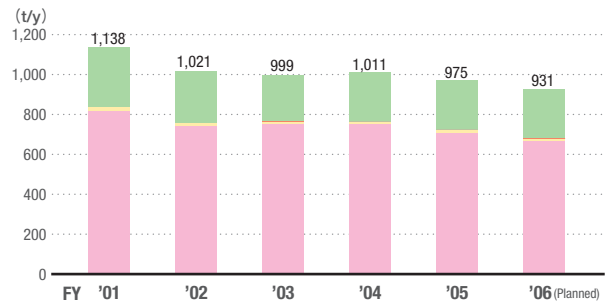
a major impact on water quality, discharge water only after it has been purified by such means as activated-sludge or wet oxide processes, and the discharge is always strictly monitored.

Efforts to reduce emissions include monitoring emissions at their sources and taking emergency measures at the first sign of any change in the natural environment such as photochemical smog warning. In addition, UBE continually monitors environmental measurements taken at various sites around Ube City. This measurement data is reflected in factory operations according to air pollution preventing management standards, which are already established.

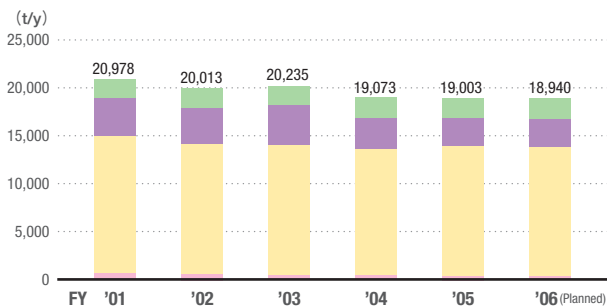
### SOx emissions



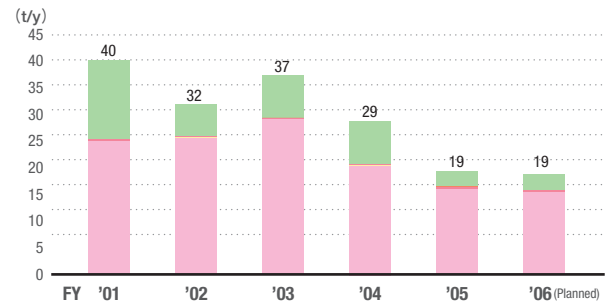
### COD<sup>\*4</sup> emissions



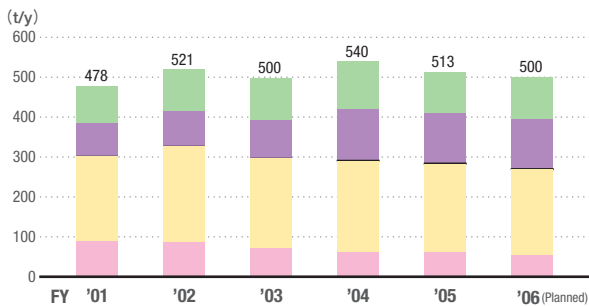
### NOx emissions



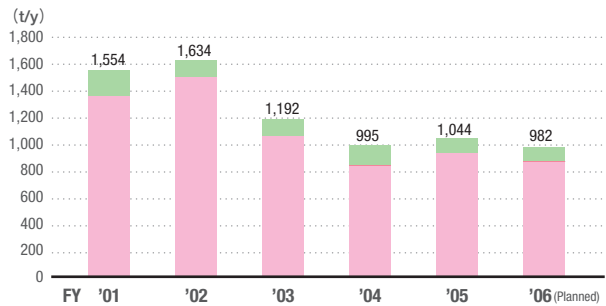
### Total Phosphorus<sup>\*5</sup> emissions



### Dust emissions



### Total Nitrogen<sup>\*5</sup> emissions



■ Group companies 
 ■ Energy & Environment 
 ■ Machinery & Metal Products 
 ■ Cement & Construction Materials 
 ■ Chemicals & Plastics

## A Glossary

\*1 SOx: Sulfur oxides originate in the sulfur (S) component of fuels. Boilers are the main producers of SOx.

\*2 NOx: Nitrogen oxides originate in the nitrogen (N) components of fuel and air when a fuel is combusted in air. Boilers and cement kilns are the main sources of NOx.

\*3 The 5th Provision of the Effluent Discharge Regulation: Based on the Water Pollution Control Law to further lower pollutant load levels in large enclosed sea areas such as Tokyo Bay, Ise Bay and the Seto Inland Sea, beginning in fiscal 2000 the regulation identified COD, nitrogen and phosphorous as designated items and set reduction targets for each sea area, with fiscal 2004 as the target date for achievement.

\*4 COD (Chemical Oxygen Demand): This is an indicator of water pollution by organic substances and is the amount of oxygen consumed in the chemical oxidation of organic matter.

\*5 Total nitrogen, total phosphorous: These are water pollution indicators related to the maintenance of the biologic conditions in rivers, lakes and seas.

## Product Safety

The UBE Group is continually working to improve its product safety systems and ensure that all products are safe and of a uniformly high standard of quality. Group-level product safety, product liability and product quality action plans are implemented through a process of deliberation, reporting and review by the Group Product Safety (Product Liability) Committee, which is chaired by the President.

### ■ Material Safety Data Sheets (MSDS)<sup>\*1</sup>

UBE prepares MSDSs for products. These are distributed to customers to ensure that all products are used safely. Safety information is also shared within the UBE organization by posting MSDS information on the corporate intranet. Internal regulations include MSDS creation and updating standards that require the continuous collection and distribution of up-to-date information about hazards, toxic substances, law changes and other important matters. The UBE Group is continually working to ensure that all information is current, and in fiscal 2005 it updated or created MSDSs, including foreign language versions, for 250 products.

In fiscal 2005, UBE began to publish MSDS details for its main chemical products on its external website.



### ■ Labeling

Product containers are affixed with warning labels<sup>\*2</sup> that indicate precautions necessary for safe handling. UBE is also actively implementing the "Container Emergency Card (label format)"<sup>\*3</sup> labeling system in its product line-up. This system is promoted by the Japan Chemical Industries Association.



### ■ Distribution Safety

The Distribution Subcommittee works under the direction of Product Safety Committee to implement plans throughout the year, cooperating with local distribution groups to prevent accidents and ensure improved distribution quality.

The Committee works as a unit with the Group companies and associated companies to ensure distribution safety. It does so through periodic checks of Yellow Cards<sup>\*4</sup> (emergency cards), conveying and exchanging distribution information, conferring on accidents and initiating truck accident training drills, among other activities.

## A Glossary

- \*1 **MSDS:** The Material Safety Data Sheet, containing the product name, chemical and materials characteristics, applications, warnings and other information.
- \*2 **Warning Label:** Showing the product name, address of contact and other legally required information, as well as precautionary information on dangers and safe handling.
- \*3 **Container Emergency Card (label format):** A warning label with emergency contact information and UN chemical code number. Used when mixing shipments of different products or when shipping small orders where other information formats would be impractical.
- \*4 **Yellow Card:** Emergency card, which is a warning label used when transporting products, with emergency contact information, product characteristics and handling instructions.
- \*5 **Domestic safety check program:** Also known as the "Japan Challenge Program," this initiative is unique to Japan. Its purpose is to gather information on the safety of existing chemical substances through industry-government collaboration, and to disseminate that information to the public. It was launched in June 2005.
- \*6 **ICCA:** The International Council of Chemical Associations.
- \*7 **Green Purchasing:** The practice of basing purchase decisions not only on price and quality but also upon environmental impact, with preference given to items requiring minimum service and causing the least environmental burden.

### ■ Participation in Chemical Safety Management Initiatives in Japan and Overseas

UBE is actively involved in international initiatives concerning the safe management of chemicals, including the collection of safety information concerning high production volume (HPV) chemical products and toxicity assessment.

UBE has registered for projects concerning eight substances and has completed evaluations of six. It is also gathering safety information on two substances under a safety inspection program<sup>\*5</sup> that was established in Japan in 2005. Through the Japan Chemical Industry Association, UBE is actively supporting the ICCA<sup>\*6</sup>'s Long-Range Research Initiative (LRI). The LRI focuses on the effects of chemical substances on human health and the environment.

### ■ Green Purchasing<sup>\*7</sup>

UBE Group supports the provisions of the Green Purchase Law by selecting ecologically friendly "eco-products" when purchasing such office supplies as writing implements, stationery and uniforms. This report is printed on 100% recycled paper using vegetable inks.

The green purchasing composition ratio at UBE is 52%.

### ■ Response to Green Procurement by Customers

Efforts are being made to reduce the use of harmful materials in all types of products as well as to design for easy recycling, and this is particularly true in the electronics and electrical equipment manufacturing industry. UBE appreciates these "green" efforts and is doing its utmost to provide manufacturers with the correct materials for these products.

UBE itself takes care in its own management of materials, applying company standards that have been established to improve its product sourcing and management of raw materials.

### ■ Quality Control Activities

UBE systematically implements a quality management framework and product quality improvement activities based on the ISO quality management system. Quality-related complaints from customers have continued to decline over the years. In fiscal 2005, UBE undertook a comprehensive review of past quality-related complaints and strengthened measures to prevent product contamination by foreign substances.

# Occupational Safety and Health

Under the Environmental and Safety Principle: "Respecting people means putting safety first in all areas," the UBE Group promotes safety, health and plant safety measures at all offices and facilities.

## Occupational Accident Prevention Activities

We implement various safety and disaster prevention activities, including danger prediction training (so called KYT), total productive maintenance (TPM), "hiyari-hat" activities, "identifying and naming," accident case study, and risk assessment in an effort to prevent disasters and accidents.

All factories held safety and health committees with management and labor representatives. These meet every month to receive and discuss safety reports. Each meeting ends with a recitation of the "5 do's" and "5 don'ts" from a safety and accident reduction poster based ideas gathered from every workplace in the UBE Group.

UBE has established Occupational Safety and Health Management Systems (OSHMS) as a framework for its accident reduction efforts. It is also working to achieve certification of these systems. Details of progress made can be found on Page 26-27.

The UBE Group holds an annual Group Safety and Health Conference where awards are presented and employees and affiliated companies have an opportunity to increase their awareness of safety issues. In addition, the UBE Group announces the previous fiscal year's safety performance and the UBE Group endeavors to have participants reaffirm the elimination of occupational accidents.



A disaster drill based on truck rollover accident



The UBE Group safety poster

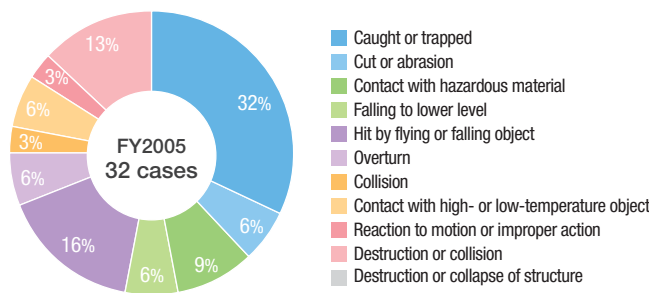


The UBE Group Safety and Health Conference

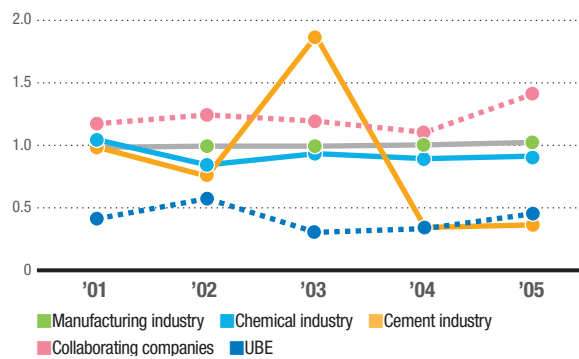
## Prior Safety Assessments of Chemical Substances

Based on procedures designated in safety assessment standards, we also perform prior safety assessments of chemical substances that we have developed or plan to start handling. In fiscal 2005, the UBE Group performed 22 prior chemical substance safety assessments.

Breakdown of Accidents (Lost-Time and Non-Lost-Time Accidents Involving Employees of UBE and its collaborating companies)



## Lost-time Injury Frequency Rate (UBE)



Notes: (1) Data on lost-time injury frequency rates for the manufacturing, chemical, and cement industries are based on Ministry of Health, Labour, and Welfare data. (2) Frequency rate = number of lost-time injuries/million working hours

### Message from an Employee



Environment & Safety Department

**Yasuo Ohyama**

#### Aiming to Become an Ever Safer Corporate Group

Between fiscal 2003 and fiscal 2006, the UBE Group has worked to raise its safety management level by introducing an occupational safety and health management system (OSHMS) and obtaining external certification. Sites operated by the parent company, Ube Industries, Ltd., have either obtained certification or are preparing to do so. The majority of Group companies are at the same stage. Top management introduced the OSHMS, but all workers employed in each site participate in a repeated cycle of activities under a management framework designed to generate an upward spiral of improvement. The basic aims of the system are to channel the efforts of all workers toward the early identification and systematic elimination of potential accident causes. The Environment & Safety Department helps to promote the OSHMS through various activities, including various educational programs and environmental and safety audits.



# Process Safety and Disaster Prevention

Safe operation of factories and facilities is a major concern not only of UBE employees but of local citizens, as well. The UBE Group is concerned from its highest ranks down to its most basic policies with operational and employee safety, and this concern is manifest not only in written procedures and directives but also in actual, regular on-site emergency drills and safety patrols. UBE's employees receive different kinds of safety training that serves to build a culture of safety throughout the Group.

## Safety Education

Through an overall education policy, immediately after joining the Company, new employees are taught the importance of and correct attitude toward the environment, safety and health, and practical training programs are implemented in each workplace.

In addition, managers and executives are also taught about the regulations and laws applied.

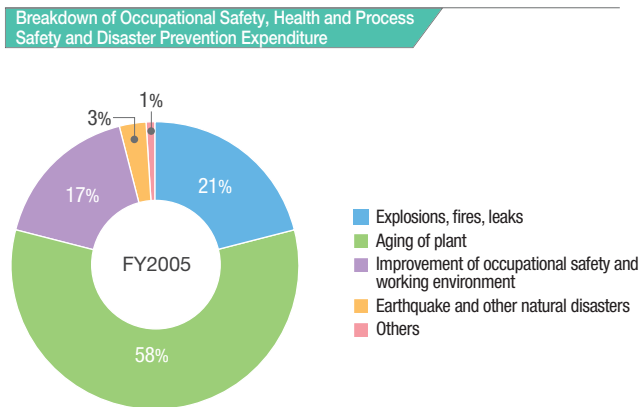
## Prior Plant Safety Assessments

The methods stipulated in the in-house plant safety assessment standards are used when carrying out prior and post plant safety assessment on newly installed, additional or modified facility, and when establishing or amending related regulations.

In fiscal 2005, the UBE Group carried out 37 assessments.

## Process Safety and Disaster Prevention Measures

In fiscal 2005, the UBE Group spent ¥4.12 billion on safety and security measures. (¥5.74 billion in fiscal 2004.)



## Emergency Training

Each month a variety of safety-related activities are implemented at UBE Group business offices and sites. These include emergency drills, reciprocal workplace checks by safety supervisors, and reciprocal safety patrols with associated companies. Training information is also provided on websites to assist those who cannot participate directly in training and patrols.



Emergency drill

## Safety Qualifications

We encourage our employees to obtain legal qualifications for the safe operation and management of our workplaces.

Qualification	UBE Group (persons)	UBE (persons)
Pollution control manager and chief	573	383
Environmental measurement expert	19	16
Working environment measurement expert	61	48
Health supervisor	305	226
Energy supervisor	241	159
Hazardous materials supervisor	4,644	3,416
Operations chief for work handling		
Specified chemical substances	983	637
High-pressure gas production safety officer	1,469	1,243
Boiler safety officer	1,326	976

(As of April 2006)

## Message from an Employee



Group Leader, Environment, Safety and Quality Assurance Group, Nishioki Factory

**Tsuyoshi Nakamura**

### Ensuring Safety in Our Factory

The Nishioki Factory recently renewed its certification to carry out safety inspections under the High-Pressure Gas Safety Law. We began to implement the safety management system required for this certification in fiscal 2006, in addition to our existing systems, QMS, EMS and OSHMS.

We have restructured our existing process safety and disaster prevention activities under this safety management system. The result is improved risk reduction, compliance, objectivity and transparency. Our aim is to ensure that everyone will be confident in the safety of our factory.

# Measures Applied toward Group Companies

## Domestic and Overseas Bases



All the companies of the UBE Group are working as a team with UBE to promote Responsible Care activities.

Of course, major companies of the Group participate in the Group Environment & Safety Committee, Segment Environment & Safety Committees, the Global Environment Preservation Promotion Committee and the Product Safety (PL) Committee. At the same time, the environment & safety audits and environment & safety inspections are implemented by Group member companies.

The Environment & Safety Department, serving as secretariat, oversees all of the environment & safety audits, checking on activities and recording results of PDCA cycles relating to environmental preservation, safety and health and process safety and disaster prevention. Environment and safety inspections are headed up by Group executives (the president and directors) who inspect the overall environment and safety activities of all facilities, mainly through on-site observation.

In-house companies undergo similar voluntary inspections to its relating companies.

### Environment & Safety Audits and Inspections at a Glance (Fiscal 2005)

	Environment & Safety Audits	Environment & Safety Inspections
UBE Offices	<ul style="list-style-type: none"> <li>Ube Chemical Factory</li> <li>Ube Cement Factory</li> <li>Nishioki Factory</li> <li>Sakai Factory</li> <li>Isa Cement Factory</li> <li>Chiba Petrochemical Factory</li> <li>Kanda Cement Factory</li> <li>Technology Center, Chemical Production Division</li> <li>Ube Aluminum Wheel Factory</li> <li>Power BU (Power Generation Station)</li> </ul>	<ul style="list-style-type: none"> <li>Ube Chemical Factory</li> <li>Ube Cement Factory</li> <li>Nishioki Factory</li> <li>Chiba Petrochemical Factory</li> <li>Isa Cement Factory</li> <li>Ube Aluminum Wheel Factory</li> <li>Sakai Factory</li> <li>Kanda Cement Factory</li> <li>Okinoyama Coal Center</li> <li>Power BU (Power Generation Station)</li> <li>Ube Research Laboratory (voluntary)</li> </ul>
Group companies	<ul style="list-style-type: none"> <li>Ube Machinery Inc.</li> <li>Ube Agri-Materials</li> <li>Hagimori Industries, Ltd.</li> <li>Fukushima Ltd.</li> <li>Ube Maintenance</li> <li>Ube Shipping and Logistics, Ltd.</li> <li>Ube Techno Eng. Co., Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>Ube Ammonia Industry, Ltd.</li> <li>Ube Film, Ltd. (Onoda Factory)</li> <li>Ube Materials Industries, Ltd. (Mine Factory)</li> <li>Ube Machinery Inc.</li> <li>Ube Shipping and Logistics, Ltd. (voluntary)</li> <li>Hagimori Industries, Ltd. (voluntary)</li> <li>Ube-Mitsubishi Cement Research Institute Corporation, Ube Center (voluntary)</li> </ul>

## Chemicals

### Ube Chemical Factory



**Location:** 1978-10 Ohaza Kogushi, Ube City, Yamaguchi  
**Start of operations:** 1933  
**Site area:** 671,000m<sup>2</sup>  
**Employees:** 912  
**Main products:** Caprolactam, Nylon resin, Active pharmaceutical ingredients and Intermediates, Fine chemicals, High-purity chemicals, Industrial pharmaceuticals and Fertilizers, Polyimide resins, Separation membranes, New materials

UBE's reputation as an innovative chemical manufacturer has been built on the continuous technology innovation ever since the start of operations at this facility. Materials from the UBE Chemical Factory are used in a wide range of fields, including the manufacture of digital home appliances, household products, automotive parts, pharmaceuticals and other familiar items, as well as advanced aerospace engineering. CSR activities at this plant are guided by a factory policy that calls for harmonious coexistence with local communities, society and the maintenance of public confidence, as well as a reliable contribution to UBE's profits. This policy is put into effect through yearly programs of activities based on these themes. Reliable factory operations depend on the maintenance of safety on four levels: labor, the environment, facilities and product quality. UBE works continuously to achieve improvement, and to eliminate risk factors through prioritized measures targeting the highest risks first. The aim is to maintain public confidence and ensure that all workplaces are safe and secure.

### Chiba Petrochemical Factory



**Location:** 8-1 Goi Minami Kaigan, Ichihara City, Chiba  
**Start of operations:** 1964  
**Site area:** 562,000m<sup>2</sup>  
**Employees:** 203  
**Main products:** Polyethylene, Synthetic rubber

The Chiba Petrochemical Factory manufactures petrochemical products, especially synthetic rubber and polyethylene. It is located in Ichihara City, Chiba Prefecture, which forms part of the Keiyo industrial belt along the coast of Tokyo Bay.

Safety measures at this complex have been further strengthened on the basis of a risk assessment carried out in 2001. The factory has further strengthened operational safety measures through risk assessment evaluation since 2001. In April 2006, the Chiba Petrochemical Factory obtained certification under the OHSAS18001 standard for occupational safety and health management systems. In the area of process safety and disaster prevention, the Chiba Petrochemical Factory's efforts to ensure facility reliability are based primarily on the RCM approach.

Maintenance activities by individual workers also play an important role in the early detection and repair of faults. As a result of these efforts, facility breakdowns have been reduced by 50%. The effective implementation of environmental management systems based on the ISO 14001 system have significantly contributed to product safety while also reducing emissions of substances that cause environmental loads.

### Sakai Factory



**Location:** 3-1 Chikko Shinmachi, Nishi-ku, Sakai City, Osaka  
**Start of operations:** 1967  
**Site area:** 463,000m<sup>2</sup>  
**Employees:** 235  
**Main products:** Caprolactam, Ammonia, Liquefied carbon dioxide, Electrolytic fluids

The Sakai Factory is situated in the Sakai-Senboku industrial belt along Osaka Bay. Its activities relate to the manufacture of chemical products, especially caprolactam. Ensuring safety and the environment are given priority in all factory operations. This approach is based on the view that productivity is not possible without safety, and that accidents and disasters must be prevented. The Sakai Factory aims to achieve customer satisfaction through the reliable supply of products, and to manufacture chemical products that are kind to the local communities, human beings and Earth. This philosophy is manifested in CSR activities based on self-management systems in the areas of environmental preservation, health and safety, process safety and disaster prevention.

At the regional Responsible Care dialogue meeting for the Sakai-Senboku region in March 2006, UBE held a discussion session with members of the local Hamadera-Ishitsu community council and representatives of government agencies. It also presented a poster session to inform participants about CSR activities at the Sakai Factory.

The Sakai Factory will continue to fulfill its corporate social responsibilities by contributing to local communities, and by fostering good communications with government agencies, neighboring companies and local residents.

## Environmental Data (t/year)

Fiscal year	Ube Chemical Factory		Chiba Petrochemical Factory		Sakai Factory	
	2004	2005	2004	2005	2004	2005
CO <sub>2</sub> emissions (thousand t-c)	216	206	53	54	156	170
SO <sub>x</sub> emissions	1,851	1,701	17.0	0.5	3.6	4.7
NO <sub>x</sub> emissions	3,337	3,033	11.6	3.3	308	320
Dust emissions	137	134	2.5	1.9	48	47
COD emissions	561	499	19.1	9.7	167	197
Total nitrogen emissions	617	661	6.0	3.7	213	264
Total phosphorus emissions	14	13	0.3	0.1	5.7	3.2
Waste final disposal volume	277	165	121	599	412	492

## Cement & Construction Materials

### Ube Cement Factory



**Location:** 1978-2 Ohaza Kogushi, Ube City, Yamaguchi  
**Start of operations:** September 1923  
**Site area:** 420,000m<sup>2</sup>  
**Employees:** 188

In 1996, UBE installed an advanced NSP kiln at the Ube Cement Factory, and in 2002 it completed the rationalization of transportation and shipment facilities. These measures have transformed the UBE Cement Factory into the most energy efficient plant in Japan. It contributes to society by recycling waste from throughout Japan. Its location on the coast of the Seto Inland Sea allows these materials to be transported with optimal efficiency.

In fiscal 2006, additional waste treatment facilities were added to the factory's fuel systems. These facilities will allow waste to be recycled as fuel, helping to slow the depletion of coal and other natural resources. Waste inputs are managed using a quality control system based on the ISO 9001 standard and an environmental management system based on the ISO 14001 standard. In addition, the Ube Cement Factory holds prior consultations with local government officials whenever necessary. Care is also taken to build understanding with all concerned through environmental consultation meetings.

In the area of occupational safety and health, the Ube Cement Factory continues to work actively to ensure workplace safety. In March 2005 it obtained OSHMS compliance certification.

### Isa Cement Factory



**Location:** 4768 Isa, Isa-cho, Mine City, Yamaguchi  
**Start of operations:** July 1955  
**Site area:** 381,000m<sup>2</sup> (excludes mines)  
**Employees:** 156

The Isa Cement Factory is located near the Akiyoshi-dai Quasi-National Park. Known for its dramatic karst topography, the region is also one of Japan's leading producers of cement and limestone. UBE works actively to foster harmonious coexistence and good communications with residents near the factory through community dialogue and various other initiatives, including participation in local events.

Various waste materials are used as cement raw materials and fuel at the Isa Cement Factory. In addition, the factory's in-house power generation plant is now partially fueled by woody biomass instead of coal. These initiatives are making an important contribution to the formation of a recycling-oriented society.

UBE works closely with the staff and suppliers of the Isa Cement Factory to ensure that all systems continue to function effectively. The factory's quality control system has been certified under the ISO 9001 standard and its environmental management system under the ISO 14001 standard. In September 2005, the Isa Cement Factory also obtained OSHMS certification for its occupational safety and health systems.

### Kanda Cement Factory



**Location:** 7 Nagahama-cho, Kanda-machi, Miyako-gun, Fukuoka  
**Start of operations:** December 1964  
**Site area:** 205,000m<sup>2</sup> (excludes mines)  
**Employees:** 71

The Kanda region in northern Kyushu is an extremely dynamic region that has attracted investment by company in various industries, including automobile manufacturing. It has excellent transportation facilities, notably New Kitakyushu Airport and the Eastern Kyushu Expressway.

The Kanda Cement Factory is as dynamic as the Kanda region. As UBE's main waste treatment plant, it is making an important contribution to the formation of a recycling-oriented society. A high-chlorine by-pass system began operations in fiscal 2005 allows the factory to treat ash from urban waste incinerators into raw materials. The Kanda Cement Factory is also working to reduce CO<sub>2</sub> emissions by expanding its capacity to use waste materials as fuel.

Quality control and environmental management systems at the Kanda Cement Factory have been certified under the ISO 9001 and ISO 14000 standards. The factory has also obtained OSHMS certification for its occupational safety and health systems. In an era when the fulfillment of corporate social responsibility has become an absolute imperative, the Kanda Cement Factory is using these initiatives to maintain and enhance its record as an organization capable of working within the rules to deliver the promised results in cooperation with its suppliers.

### Environmental Data (t/year)

Fiscal year	Ube Cement Factory		Isa Cement Factory		Kanda Cement Factory	
	2004	2005	2004	2005	2004	2005
CO <sub>2</sub> emissions (thousand t-c)	371	394	1,069	1,034	420	444
SO <sub>x</sub> emissions	88	86	297	348	27	17
NO <sub>x</sub> emissions	2,254	2,064	7,869	8,283	3,054	3,113
Dust emissions	28	42	132	103	67	73
COD emissions	12	12	0	0	1	2
Total nitrogen emissions	...	...	...	...	...	...
Total phosphorus emissions	...	...	...	...	...	...
Waste final disposal volume	0	0	0	0	0	0

## Machinery & Metal Products

### Ube Machinery Corporation



**Location:** 1980 Ohaza Kogushi Aza Okinoyama, Ube City, Yamaguchi  
**Start of operations:** 1942  
**Site area:** 270,000m<sup>2</sup>  
**Employees:** 687  
**Main products:** Injection molding machines, Die-casting machines, Extrusion presses, Transportation equipment, Crushers, Bridge members / Steel structures

Ube Machinery Corporation is the UBE Group's core site for the manufacture of Machinery & Metal Products. Located on a promontory of the Port of Ube, it produces industrial machinery and steel structures for use in key industries. This company's corporate culture is based on an emotional commitment to the creation of quality products that will evoke a positive response from customers. All activities are guided by the UBE Group's basic Principles on the Environment and Safety.

Among the tools used by Ube Machinery Corporation to improve its performance in the areas of environmental preservation, safety and health are an environmental management system that was certified under the ISO 14001 standard in 1999, and an occupational health and a safety management system for which certification under the OSHAS18001 standard was obtained in fiscal 2005. The company's entire organization is united in efforts to maintain and improve environmental preservation, safety, peace of mind, reliability and health.

### Ube Aluminum Wheel Factory (Former U-Mold Co., Ltd.)



**Location:** 2575-62 Ohaza Fujimagari, Ube City, Yamaguchi  
**Start of operations:** 1987  
**Site area:** 110,000m<sup>2</sup>  
**Employees:** 248  
**Main products:** Aluminum wheels

This factory's policy is to manufacture reliable, Earth-friendly products efficiently and safely while helping to preserve the environment.

The aluminum used to manufacture wheels is in tune with the requirements of today's world as a material that can be reduced, reused and recycled (the "three Rs"). UBE and its employees build on this important advantage to achieve further improvement in its environmental and safety performance by setting and meeting yearly targets that reflect the needs and expectations of its customers and society. The rules on which these activities are based consist of ISO/TS 16949, which is an international standard for motor vehicle manufacturers, the ISO 14001 environmental management standard, and the OSHAS18001 standard for occupational health and safety management. Through these management systems, the Ube Aluminum Wheel Factory clearly identifies the needs of its customers and society and meets those needs through maintenance and improvement of its operations.

### Ube Steel Co., Ltd.



**Location:** 1978-19 Ohaza Kogushi Aza Okinoyama, Ube City, Yamaguchi  
**Start of operations:** 1977  
**Site area:** 102,000m<sup>2</sup>  
**Employees:** 182  
**Main products:** Billets, Castings

Ube Steel Co., Ltd. is the UBE Group's main manufacturer of Machinery & Metal Products. It uses electric furnaces to process scrap iron into steel billets and castings. To reduce the environmental loads resulting from its production activities, the company is working to reduce and recycle dust from its furnaces. In addition to its role in the recycling of scrap iron, Ube Steel also helps to meet the needs of the recycling-oriented society by using its electric furnaces for the treatment of industrial and medical waste through plasma melting. Industrial waste supplied to the electric furnaces is recovered and utilized as heat, metal billets and slag.

### Environmental Data (t/year)

Fiscal year	Ube Machinery Corporation		Ube Aluminum Wheel Factory		Ube Steel	
	2004	2005	2004	2005	2004	2005
CO <sub>2</sub> emissions (thousand t-c)	5	5	23	23	58	55
SO <sub>x</sub> emissions	0.2	0.2	1.4	1.2	13.8	13.9
NO <sub>x</sub> emissions	...	...	11.8	1.3	51.4	51.3
Dust emissions	...	...	0.9	1.8	13.4	13.0
COD emissions	1.1	1.2	0.2	0.2	0.9	0.9
Total nitrogen emissions	1.9	2.2	0.3	0.3	0	0
Total phosphorus emissions	0.2	0.2	0.04	0.04	0	0
Waste final disposal volume	924	197	60	105	1,138	112

## Site Reports

### Group Companies (Subject to Environmental Performance Monitoring in This Report)

#### Ube Film, Ltd.



Location: Sanyo-Onoda City, Yamaguchi  
 Start of operations: 1964  
 Site area: 50,000 m<sup>2</sup>  
 Employees: 130 (Head office/Onoda Factory)  
 Main products: Wrapping film for home and commercial use, Heavy Wrapping Bag, Stretch film, Functional film and Retarder

#### Ube-Nitto Kasei Co., Ltd.



**Gifu Factory**  
 Location: Gifu City, Gifu  
 Start of operations: February 1966  
 Site area: 137,000 m<sup>2</sup>  
 Employees: 239  
 Main products: Optical fiber cable materials, Flexible copper laminated sheet, Plastic corrugated cardboard, FRP products

#### Fukushima Factory

Location: Kooriyama City, Fukushima  
 Start of operations: February 1966  
 Site area: 30,000 m<sup>2</sup>  
 Employees: 66  
 Main products: Polypropylene fiber, Optical fiber cable materials

#### Kemira-Ube, Ltd.



Location: Ube City, Yamaguchi  
 Start of operations: 1992  
 Site area: 12,000 m<sup>2</sup>  
 Employees: 25  
 Main products: Hydrogen peroxide (60%/35%/45%)

#### Meiwa Kasei Industries, Ltd.



Location: Ube City, Yamaguchi  
 Start of operations: 1949  
 Site area: 20,000 m<sup>2</sup>  
 Employees: 124  
 Main products: Phenolic industrial resins, Epoxy resins, Extruded plastics and Polyimide resin

#### Ube Ammonia Industry, Ltd.



Location: Ube City, Yamaguchi  
 Start of operations: 1972  
 Site area: 177,000 m<sup>2</sup>  
 Employees: 87  
 Main products: Ammonia

#### Ube Material Industries, Ltd.



**Ube Factory**  
 Location: Ube City, Yamaguchi  
 Start of operations: 1949  
 Site area: 432,000 m<sup>2</sup>  
 Employees: 300  
 Main products: Magnesia clinker, Other fire-proofing materials, magnesium-related chemical and industrial products

#### Chiba Factory

Location: Ichihara City, Chiba  
 Start of operations: 1974  
 Site area: 50,000 m<sup>2</sup>  
 Employees: 99  
 Main products: Limestone, Other ceramic products and calcium-related chemical and industrial products

#### Mine Factory

Location: Mine City, Yamaguchi  
 Start of operations: 1941  
 Site area: 84,000 m<sup>2</sup>  
 Employees: 127  
 Main products: Limestone, Other ceramic products

#### Ube Agri-Materials, Ltd.



Location: Ube City, Yamaguchi  
 Start of operations: 1955  
 Site area: 34,000 m<sup>2</sup>  
 Employees: 86  
 Main products: Compound fertilizer, Covering fertilizer

#### Ems-Ube, Ltd.



Location: Ube City, Yamaguchi  
 Start of operations: 1992  
 Site area: 13,500 m<sup>2</sup>  
 Employees: 21  
 Main products: Lauro lactam, Caprolactam, Ammonium sulfate

#### Ube Board Co., Ltd.



**Ube Factory**  
 Location: Ube City, Yamaguchi  
 Start of operations: July 1950  
 Site area: 97,000 m<sup>2</sup>  
 Employees: 175  
 Main products: Exterior materials, Ceramic siding, Slate board, Floor materials

#### Fuji Factory

Location: Fuji City, Shizuoka  
 Start of operations: October 1967  
 Site area: 23,000 m<sup>2</sup>  
 Employees: 107  
 Main products: Exterior materials, Ceramic siding, Slate board, Floor materials

## Overseas Plants

### SPAIN

#### Ube Corporation Europe S.A. / Ube Chemical Europe, S.A.



Location: Castellon, Spain  
 Start of operations: July 1967  
 Site area: 280,000 m<sup>2</sup> (including UEP)  
 Employees: 265  
 Main products: Caprolactam, 1,6-hexanediol, Ammonium sulfate, Polycarbonatediol, 1,5-pentadiol

#### Ube Engineering Plastics, S.A.



Location: Castellon, Spain (adjoining UCE)  
 Start of operations: June 2004  
 Employees: 38  
 Main products: Nylon 6 resin

### THAILAND

#### Thai Caprolactam Public Co., Ltd.



Location: Rayong, Thailand  
 Start of operations: 1997  
 Site area: 192,000 m<sup>2</sup>  
 Employees: 393  
 Main product: Caprolactam, Ammonia sulfate

#### Ube Nylon (Thailand), Ltd.



Location: Rayong, Thailand (adjoining to TCL)  
 Start of operations: 1997  
 Site area: 23,000 m<sup>2</sup>  
 Employees: 77  
 Main product: Nylon 6 resin, Nylon compound

#### Thai Synthetic Rubbers Co., Ltd.



Location: Rayong, Thailand (adjoining TCL)  
 Start of operations: 1997  
 Site area: 40,000 m<sup>2</sup>  
 Employees: 82  
 Main product: Butadiene rubber

### CANADA

#### Ube Automotive North America Sarnia Plant Inc.



Location: Sarnia, Canada  
 Start of operations: 2002  
 Site area: 283,000 m<sup>2</sup>  
 Employees: 257  
 Main product: Aluminum car wheels

#### Spain

The UBE Group's chemical manufacturing sites in Europe are Ube Chemical Europe, S.A. (UCHE) and Ube Engineering Plastics, S.A. (UEP). Both are located in the city of Castellón in Valencia, Spain. UEP manufactures nylon resin, while UCHE manufactures caprolactam and other fine chemicals. Products from these two companies are used in Spain and exported to countries throughout Europe and around the world.

#### Thailand

There are three UBE Group companies in Thailand: Thai Caprolactam Public Co., Ltd. (TCL), Ube Nylon (Thailand), Ltd. (UNT) and Thai Synthetic Rubbers, Co., Ltd. (TSL). All are located in Rayong Province, which is about 200 km south of Bangkok. These companies have continually produced caprolactam, nylon and butadiene rubber since their factories became operational.

The three factories work together on environmental and safe initiatives, and all three have obtained certification under the ISO 9002, ISO 14001 and TIS1800 standards for their quality management, environmental management and occupational safety management systems. TCL and TSL participate in Responsible Care activities in Thailand, and UNT plans to participate.

TCL, UNT and TSL work closely with the UBE Group in Japan under the Group's measures and goals. All three companies have made accident-free operation a goal for every worker. Recognition for these efforts includes Safety Awards from Thailand's Ministry of Labor, TCL in four consecutive years since 2003—UNT in 2006, and TSL in 2004 and 2005.

Because there are many houses around their factories, the three companies maintain close communications with local residents, especially on environmental matters.

#### Canada

Based in Ontario, Canada, Ube Automotive North America Sarnia Plant Inc. manufactures and supplies aluminum wheels on an OEM basis for North American automobile manufacturers, including Big 3 and Japanese-affiliated manufacturers. Canada has very strict safety and environmental standards, and the plant has implemented Responsible Care activities since it first became operational in 2002. In 2003, its second year of operation, the Sarnia Plant obtained ISO 14001 certification, and the plant has continued to develop and maintain management systems designed to protect the environment and safety and ensure compliance with laws and regulations.

The provision of product information is a continuing priority at the Sarnia Plant. In 2005, it further enhanced its Material Safety Data Sheet (MSDS) system to coincide with the installation of new painting facilities, which became operational in 2006.

There have been no work days lost through accidents at the Sarnia Plant in two consecutive years. This record reflects the effectiveness of health and safety policies with a zero-accident target. The plant's Safety Committee includes not only health and safety managers, but also selected process workers.

#### Environmental Data (t/year)

Fiscal year	Spain		Thailand		Canada	
	2004	2005	2004	2005	2004	2005
CO <sub>2</sub> emissions (thousand t-c)	43	45	83	78	10	11
SO <sub>x</sub> emissions	89	102	89	83	0.1	0.2
NO <sub>x</sub> emissions	879	996	149	179	17	18
Dust emissions	26	26	131	93	1.3	1.5
COD emissions	240	218	66	70	28	21
Total nitrogen emissions	366	338	30	69	1.7	3.0
Total phosphorus emissions	0.7	1.0	0	0	0.1	0.1
Waste final disposal volume	3,992	5,364	716	605	344	411

## Environment-friendly Products

UBE Group is contributing to the creation of a resource recycling society by developing products and technology with low environmental impact in every division of its operations. Here we introduce some of the leading products from these divisions.

◆ Use    ★ Environmental Benefit

Chemicals		
<p>Heliofresh®</p>		<ul style="list-style-type: none"> <li>◆ Refreshing marine scent (fragrance)</li> <li>★ Earlier such products were made from forest products, including wood from tropical rain-forests. UBE is helping to protect forests by synthesizing this fragrance from catechol, our original fine chemical product.</li> </ul> <p>◀ The popular Heliofresh fragrance range</p>
<p>1,6-Hexanediol</p>		<ul style="list-style-type: none"> <li>◆ Polyurethane material/solvent-free UV hardening resin/powder paints/hot-melt adhesives</li> <li>★ This product is made by recycling liquid waste produced during the manufacture of cyclo-hexane as an intermediate material for nylon.</li> </ul> <p>◀ Synthetic leather products made from 1,6-Hexanediol</p>
<p>Polycarbonatediol (PCD)</p>		<ul style="list-style-type: none"> <li>◆ Raw material for the highest-quality polyurethane resin</li> <li>★ This product helps to protect nature through its use in manufacture of synthetic leather with a texture similar to natural leather.</li> </ul> <p>◀ Synthetic leather products made from PCD</p>
<p>Dimethylcarbonate (DMC)</p>		<ul style="list-style-type: none"> <li>◆ Basic material for polycarbonate resins Alternative to dimethyl sulfate and methylene chloride A solvent for gravure inks</li> <li>★ Unlike earlier products based on phosgene, DMC has negligible toxicity and will not cause adverse environmental or health effects.</li> </ul> <p>◀ A DMC manufacturing plant</p>
<p>Separation membrane modules</p>		<ul style="list-style-type: none"> <li>◆ Hollow polyimide fibers are used to separate, refine, concentrate and recover gases.</li> <li>★ CO<sub>2</sub> separation, oxygen concentration adjustment, and the concentration of alcohol for use as an alternative to gasoline</li> </ul> <p>◀ Separation membrane modules</p>
<p>Photo-catalytic fiber modules "Aqua Solution®"</p>		<ul style="list-style-type: none"> <li>◆ Used in bathing facilities to prevent Legionella outbreaks, and in water purification systems in electroplating plants.</li> <li>★ Because these products employ photo-catalytic technology, they do not create environmental loads. They are used in a wide range of water purification applications, including the elimination of Legionella bacteria.</li> </ul> <p>◀ Aqua Solution®</p>
<p>Hydrogen peroxide (Kemira-UBE, Ltd.)</p>		<ul style="list-style-type: none"> <li>◆ Used to bleach paper, pulp and fiber Used in etching of electronic circuit board Used to eliminate bacteria</li> <li>★ This product is playing an essential role as an alternative to chlorine for wastewater purification and other uses.</li> </ul> <p>◀ A tanker loaded with hydrogen peroxide</p>



**Slow-release fertilizer**  
(Ube Agri-Materials, Ltd.)



- ◆ A long-acting fertilizer
- ★ This soil-friendly fertilizer has a neutral pH and breaks down without leaving toxic residues.

◀ Slow-release fertilizer is popular with farmers and gardeners.

**New heat-resistant "Polywrap"**  
**New "Polywrap®"**  
(Ube Film, Ltd.)



- ◆ Microwave-safe food wrapping film
- ★ This product contains no chlorine, and no toxic gases are emitted when it is incinerated.

◀ Safe-to-use wrapping products

**Cement & Construction Materials**

**F Mark-certified construction materials**



- ◆ Plastering, flooring and wall materials for use in habitable rooms
- ★ These materials have been certified under the system established by the Japan Building Coating Materials Association as meeting the formaldehyde emission requirements for the "F\*\*\*\* Mark," which is the highest grade bestowed. With negligible toxicity, this has no adverse health or environmental effects.

◀ F Mark-certified construction materials

**Self-leveling materials**



- ◆ These products are used to create level bases for various types of flooring
- ★ Because the products are mixed on site in just the quantities required, there are no residues. The result is less construction waste

◀ Application scene

**Soil improvement material for landscaping "Green Thumb"**



- ◆ Improvement of soil moisture retention and air permeability
- ★ Improved soil conditions promote plant growth

◀ Garden using "Green Thumb"

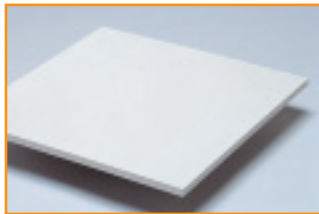
**Network floor "Eco"**



- ◆ Flooring system laid over existing floor surfaces to provide routes for cables and wires
- ★ "Eco" products are made from recycled materials, including waste plastic and glass

◀ Network floor "Eco"

**"Yasashii Kabe®"**  
(Ube Board Co., Ltd.)



- ◆ An interior material made by processing diatomaceous earth, a natural material, into dry panels
- ★ This people-friendly and environment-friendly material produces no emissions of volatile organic compounds (VOCs), which cause sick house syndrome, and also prevents condensation and mold.

◀ A "Yasashii Kabe®" panel

**"Calbreed® SII"**  
(Ube Material Industries, Ltd.)







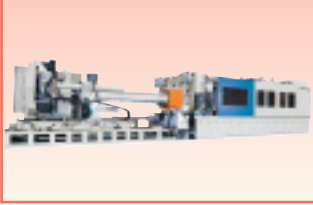


- ◆ Highly-reactive slaked lime for use in smokestack gas treatment (used in waste incinerators operated by local governments)
- ★ This product enhances absorption of toxic acid gases emitted during incineration of industrial waste.



Highly-reactive "Calbreed® SII"

◀ An incineration facility using "Calbreed® SII"

<p><b>“Sorbalit”</b> (Ube Material Industries, Ltd.)</p>		<ul style="list-style-type: none"> <li>◆ Slaked lime for use in smokestack gas treatment (used in waste incinerators operated by local governments)</li> <li>★ Sorbalit absorbs and removes dioxins and other substances contained in smokestack gas from waste incinerators.</li> </ul> <p>◀ “Sorbalit” in fine powder form</p>
<p><b>“U-Stabilizer®”</b> (Ube Mitsubishi Cement Corporation)</p> <p><b>“Green Lime”</b> (Ube Material Industries, Ltd.)</p>		<ul style="list-style-type: none"> <li>◆ Used for ground improvement, including stabilization of weak soil and sewage sludge U-Stabilizer (cement-based) and Green Lime (limestone-based)</li> <li>★ Used to improve road beds and embankments and stabilize slopes, sludge and construction residues</li> </ul> <p>◀ Application of “U-Stabilizer®”</p>
<p><b>“Clear Water®”,</b> <b>Cal-sun Marine</b> (Ube Materials Industries, Ltd.)</p>		<ul style="list-style-type: none"> <li>◆ Water quality improvers based on magnesium hydroxide and quick lime</li> <li>★ These products improve the quality of water and sediment at the bottom of the sea and lakes. They are used in closed-water areas and marine farms.</li> </ul> <p>◀ Improving water quality in a lake</p>
<p><b>Blast furnace cement</b> (UBE Mitsubishi Cement Corporation)</p>		<ul style="list-style-type: none"> <li>◆ Used for general civil engineering work, including foundations, port facilities and bank protection projects.</li> <li>★ It is a green product made from blast furnace slag, a by-product from iron and steel production.</li> </ul> <p>◀ Application example of blast furnace cement [Osaka Amenity Park (OAP)]</p>
<p><b>Fly ash cement</b> (UBE Mitsubishi Cement Corporation)</p>		<ul style="list-style-type: none"> <li>◆ Used for general civil and construction engineering work, including dams and port facilities.</li> <li>★ It is a green product made from fly ash, a by-product from electric power generation.</li> </ul> <p>◀ Application example of fly ash cement (Bisan Seto-Ohashi)</p>
<p><b>Machinery &amp; Metal Products</b></p>		
<p><b>Aluminum wheels</b></p>		<ul style="list-style-type: none"> <li>◆ Strong yet attractive car wheels with fine metal structure</li> <li>★ Made using a unique casting method, these wheels are as strong as forged products. Their lightweight contributes to improved fuel efficiency and the reduction of exhaust gas emissions.</li> </ul> <p>◀ Aluminum wheels for luxury vehicles</p>
<p><b>Air floating conveyor</b> (Ube Machinery Co., Ltd.)</p>		<ul style="list-style-type: none"> <li>◆ Transportation system for dust-prone products, such as coal and crushed rock</li> <li>★ This system is totally sealed to prevent dust and odors from escaping. Its revolutionary air cushion belt eliminates noise and vibration, since there are no rollers in the central part of the system. This feature also helps to save energy, since a smaller motor can be used. And because the system moves material rapidly, facilities can be smaller.</li> </ul> <p>◀ An Air Floating Conveyor system in operation</p>
<p><b>All-electric injection molding machine</b> (Ube Machinery Co., Ltd.)</p>		<ul style="list-style-type: none"> <li>◆ Plastic molding machine (ideal for integrated molding of plastic and surface materials and simultaneous in-mold coating)</li> <li>★ This is the flagship product in UBE’s range of injection molding machines. It is entirely powered by electricity and uses only minimal amounts of hydraulic fluid and coolant, which eventually become waste products. Power consumption is approximately one-third of that required for hydraulic systems and cycle time is about two-thirds as long. The energy savings are substantial.</li> </ul> <p>◀ The world’s largest all-electric injection molding machine (MD 3000HW)</p>

**Woody biomass gasification and power generation facility**  
(Ube Techno Eng. Co., Ltd.)



- ◆ Power generation and heat recovery systems with gas engine powered by gasified biomass
- ★ By utilizing carbon-neutral woody biomass, it is possible to reduce consumption of fossil fuels, which is a major cause of global warming. This technology also contributes to the sound preservation and growth of forests by making effective use of sawmill chips, wood chips and other unused forest resources.

◀ A biomass gasification system

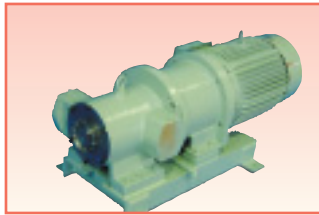
**Design and assembly of printed circuit boards using lead-free solder**  
(TU Electronics)



- ◆ Artwork design and assembly technology for printed circuit boards. It uses lead-free solder, which is an alloy of tin, silver and copper, instead of conventional lead solder.
- ★ In the European Union, the use of lead solder in electrical and electronic equipment manufactured after July 2006 is totally prohibited under the EU's RoHS directive, which restricts the use of certain hazardous substances in electrical and electronic equipment.

◀ A printed circuit board made using lead-free solder

**Fuel conditioner**  
(Fukushima Ltd.)



- ◆ Removes 70-80% of sludge contained in heavy fuel oil for marine engines
- ★ Sludge contained in fuel oil produces soot, which is a cause of atmospheric pollution. It also increases engine wear. This system uses ultrasonic waves and other processes to pulverize the sludge, allowing for clean combustion.

◀ Fuel Conditioner

**"Billets"**  
(Ube Steel Co., Ltd.)



- ◆ Manufactured by recycling ferrous resources in electric furnaces, it is used in steel rolling mills in Japan and overseas.
- ★ These environment-friendly recycled products are made primarily from scrap, but industrial wastes, such as waste plastic, are also used as its raw materials and fuel.

◀ "Billets" born from scrap and industrial waste

**Energy & Environment**

**"EUP" two-stage pressurized gasification process**



- ◆ A process to synthesize waste plastic and shredder dust into gases that can be used as chemical raw materials
- ★ This is a highly effective disposal method for waste plastic. Prior separation and removal of vinyl chloride is not required. In 2005 this process won a Global 100 Eco-Tech Award from the Japan Association for the 2005 World Exposition, Aichi, Japan.

◀ The "EUP" plant is in the limelight

**"Z-Sand®"**



- ◆ A light, water-permeable artificial sand that can be used as a substitute for natural sand and soil
- ★ This new civil engineering material provides a way to prevent coal ash from contaminating the environment by turning it into a useful resource.

◀ "Z-Sand®"

**Incinerator ash recycling technology**  
(Yamaguchi EcoTech)



- ◆ Technology to turn incinerator ash into a raw material for cement
- ★ This system safely and reliably processes incinerator ash into a cement raw material. Before it is fed into high-temperature cement kilns, the ash is first treated to remove dioxin and washed to remove chlorine.

◀ This plant turns incinerator ash into a raw material for cement.

**Organic recycling**  
(West Japan Green Recycling)



- ◆ A process for making pulping chips and compost from organic waste, such as logging waste and garden trimmings
- ★ Organic materials are effectively recycled into useful, environment-friendly resources.

◀ Wood chips and compost are processed from green waste.

## Third-party Opinions

### Third-party Verification and Comments

In July 2006, UBE underwent third-party verification of “Process safety and disaster prevention” and “distribution safety” codes by the Responsible Care Verification Center. The verification of these codes

was the first time. The verification opinion and the assessment findings in the verification report will be used to achieve further improvement in UBE’s Responsible Care activities.



#### Responsible Care Verification—Written Opinion (Translation from Japanese)

July 22, 2006

Mr. Hiroaki Tamura  
President and  
Group Chief Executive Officer  
Ube Industries, Ltd.

Akio Yamamoto  
Chairman, Verification Advisory Committee

Yasuo Tanaka  
Chief Director, Responsible Care Verification Center

#### Objectives of Verification

The Responsible Care verification purports to compare and assess the level of activities by a company engaged in Responsible Care activities in accordance with the Responsible Care Code.

#### Scope of Verification

The Responsible Care (RC) verification was carried out at the head office and Nishioki Factory of Ube Industries, Ltd. according to the following schedule.

Evaluation module	Subject Site	Date
Process safety and disaster prevention	Nishioki Factory	July 18
Distribution safety	Ube Buturyu Service, Ltd.	July 18

#### Verification Procedures

Verification staff conducted the following verifications in accordance with the verification procedures.

- The verification staff examined responses to a list of questions prepared on the basis of codes corresponding to the scope of the verification. They also conducted an advance audit of documents.
- Head office and factory RC personnel were interviewed, and related documents were audited.

#### Opinion Concerning Responsible Care Activities

##### —All RC activities—

- It was found that the President himself provides active leadership for RC activities, including participation in environmental and safety audits of major factories.

##### —Process safety and disaster prevention—

- It was found that the accident prevention policy was included as a priority item in the factory’s 10 management targets, and that it had been broken down into specific measures that were being implemented under the strong leadership of the factory manager.
- It was found that facilities and equipment had been classified by importance, that corresponding management standards had been stipulated, that fault records were being maintained in a database, and that facility maintenance measures were being implemented.
- It was found that the incidence of faults in the polypropylene plant had been reduced over the past seven years, from five cases in the first year to zero in the past two years.
- It was found that the factory is working to share accident case reports with other factories and companies, and to raise safety awareness among employees, and that the factory has remained accident-free since it became operational.
- The results of important process safety and disaster prevention education programs should be assessed and checked, such as through exams, and an effective PDCA cycle should be established for education.

##### —Distribution safety—

Product logistics are handled by the Procurement & Logistics Division of Ube Industries, Ltd., while Ube Buturyu Service, Ltd., an affiliated company, handles on-site logistics at factories controlled by Ube Industries, Ltd.

- It was found that safety measures relating to on-site logistics were being implemented extensively and consistently. It would be possible to improve the dynamism and efficiency of activities by modulating them according to a priority-based activity plan.
- It was found that close attention was being paid to the elimination of forklift accidents, which is a priority goal in relation to on-site logistics, and that the Sakai Plant is working to raise safety awareness and eliminate forklift accidents by taking its own initiatives to ensure seatbelt use.
- It was found that “hiyari-hat” (near-accidents) were being included in risk assessments, and that systems had been developed to assess and manage these situations thoroughly.
- A logistics council made up of transportation contractors has been established with the parent company’s Procurement & Logistics Division acting as secretariat. Its aims are to prevent transportation-related industrial accidents, and to improve the quality standards of members.

Specifically, the secretariat staff visits member companies regularly to conduct audits based on quality/environment/safety and health checklists. If there are problems, they issue remedial action advice and confirm that the necessary steps have been taken by means of remedial action reports. It was found that this system was being used to monitor and raise the levels of member companies.

- Important distribution-related safety issues could perhaps be identified more clearly if product distribution operations and on-site logistics were integrated. It may be useful to consider a shift to integrated management of these areas in the future.

## Comments from Knowledgeable Individual



Professor of Graduate School of Engineering, Yamaguchi University  
**Naoya Kojima**

Concern over past approaches to business led manufacturers, under the leadership of the Japan Chemical Industry Association, to introduce responsible care (RC) activities. These are now being integrated constructively into corporate social responsibility (CSR) activities, which require a clearer commitment by companies to the fulfillment of their social responsibilities. The development of specific CSR programs by individual companies has inevitably involved a

certain amount of trial and error. However, it is apparent from this report that a range of initiatives are resulting in steady progress toward the development of systems.

CSR activities have tended to focus on American perspectives, such as compliance with standards and rules, the improvement of fundamental items, and the treatment of shareholder interests as the first priority. I believe that it is important to give concrete expression to the individuality of companies as entities in society. While RC activities must obviously include items relating to compliance and corporate governance, especially with regard to the environmental issues that initially prompted RC activities, we also need to acknowledge that significant results have also been achieved from a historical perspective. I hope that companies will continue their efforts to express themselves as organizations through these activities.

I strongly hope that all individuals involved in this organization will remain strongly committed to these activities so that the various systems described in this report can function effectively, providing a clear expression of the social face of the company.

## Awarded “Fujisankei Group Prize”, the 15th Fujisankei Global Environment Awards

In February 2006, UBE won the Fujisankei Group Prize in the 15th Fujisankei Global Environment Awards. These awards are presented by the Fujisankei Group to promote industrial development in harmony with the global environment. They provide recognition for significant achievements in this area, such as the development of new technologies and products that contribute to the establishment of a sustainable recycling-oriented society, the promotion of environmental protection activities and businesses, the exploration of business and social systems for the 21st century, and the raising of awareness about global environmental issues. The recipients are companies, local governments, schools, community groups and other organizations whose efforts have resulted in exemplary achievements.

UBE was selected for an award in recognition of its significant contribution to resource recycling through its business activities, especially the expansion of waste reuse at the Kanda Cement factory resulting from its investment in a chlorine by-pass system.

The awards were presented by Their Imperial Highnesses Prince Akishino and Princess Kiko in a ceremony held on April 25 at the Meiji Kinokan Hall in Tokyo's Minato Ward. Vice-President Yasuhisa Chiba accepted the award on behalf of Ube Industries from Hisashi Hieda, CEO of the Fujisankei Group.



Picture provided by Fujisankei Business Eye

# Questionnaire Results

The UBE Group seeks the views of a wide range of stakeholders concerning its CSR activities. It obtains these views through various channels, including community dialogue, in-house briefings and questionnaire surveys.

We received 101 questionnaire responses from readers of the 2005 CSR Report. Where possible, these views will be reflected in future CSR activities and used to improve this report. Some of the views expressed are shown below.

## Views Expressed in the 2005 Questionnaire Survey

**From a corporate environmental and safety officer**

The inclusion of numerous messages from employees enhances understandability. I was very impressed by your positive efforts to communicate and disclose information, including details of accidents and other problems.

**From a school related person**

Overall the report was easy to read, and the use of graphs and photographs helped to make the information readily understandable. The depth of understanding could be further increased by including the addresses of websites offering more details about items of particular interest.

**From a stockholder**

I was very interested in waste recycling at cement factories. It would be wonderful if the use of waste could be further increased. In the section on human resource development and education, I was very interested in your employment initiatives for disabled people. I hope you will take this a step further by including retired people.

**From a student**

The decision to require questionnaires to be sent by mail rather than facsimile suggests to me that you are very determined to seek the views of stakeholders. I used the report as material for my graduation thesis.

**From a worker in a government agency**

You should promote your environmental and safety initiatives more to local residents.

**From resident near an UBE facility**

There was not enough information about the company's future growth potential and outlook.

**From a customer**

It is excellent that you have reported your various initiatives in a readily accessible format. Please continue your efforts to be a good advisor to consumers.

**From a school related person**

Previously you published an environmental report, which provided ample information about environmental matters. Since this publication is supposed to be read as a CSR report, you should provide more information about other aspects of social responsibility.

**From an environmental and safety staff member working for a corporate business organization**

I would like to see your ISO 14001 environmental manual.

**From a student**

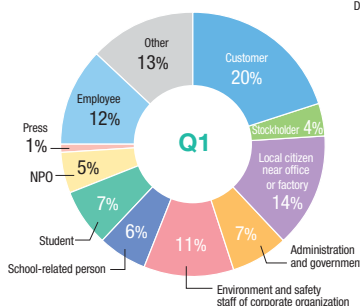
I am currently studying environmental policies, especially environmental education in businesses and schools in Germany and Japan. I am very interested in your initiatives, and I hope that you will continue to develop and expand them.

**From an environmental and safety staff member working for a corporate business organization**

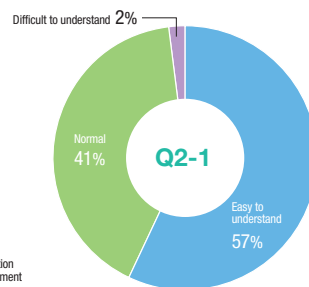
I was impressed by the clarity of the content. The inclusion of messages from employees throughout the report seemed to make it more approachable.

### Questionnaire Results

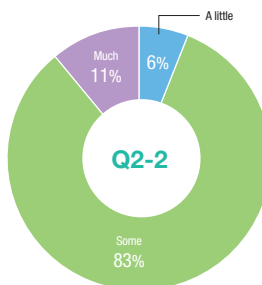
**Q1: In what status are you reading this report?**



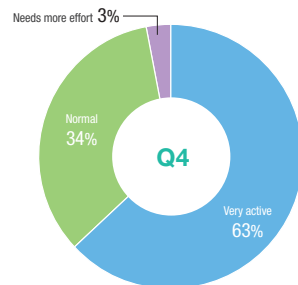
**Q2-1: What is your opinion on the content of the report?**



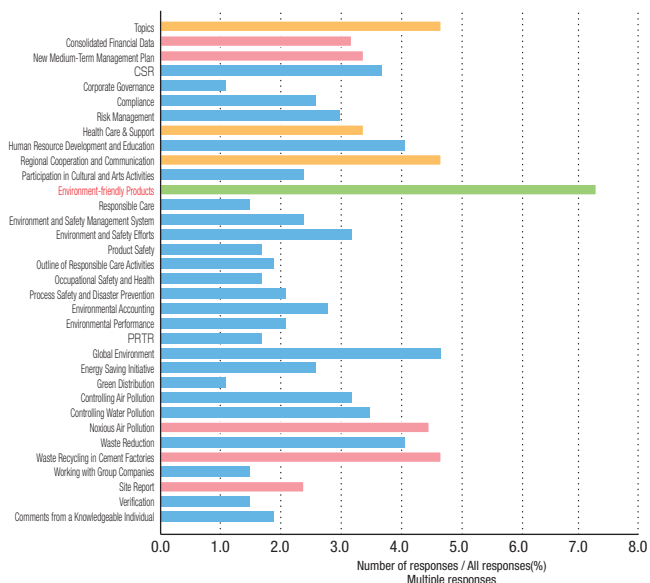
**Q2-2: What is your opinion on the length of the report?**



**Q4: What is your view of the environmental preservation efforts of the UBE Group?**



**Q3: What aspects of the report did you find especially interesting?**



We have again used the title “CSR Report” for this publication. The biggest portion of the report is still devoted to environmental matters, which require the presentation of data. However, the economic and social sections have been expanded compared with the previous year’s report. We were able to take this approach as a result of a new policy resulting from a review of corporate activities led by the CSR Promotion Secretariat. Even so, UBE’s stance as an organization devoted to quality manufacturing is apparent in two articles in the “Prologue Topics” section, one focusing on efforts to reduce environment loads in the energy supply business, the other examining the development of new products that will help to protect the environment. New content includes site reports from key UBE Group companies, and a summary of reader responses to last year’s questionnaire survey. The survey attracted a large number of responses from a wide cross-section of readers, in part because participants received free gifts, including toys representing the UBE Group’s mascot, the “UBE Dog.” Reader responses were processed statistically to reveal trends in opinions and impressions. The results are shown on Page 52.

The most fundamental task was to select target reader profiles. While a more general profile was acceptable for the sections on economic and social aspects, we decided to target people with a certain level of knowledge about chemical products or chemical companies for the environmental section. Most of UBE’s products are industrial materials, and its range of products for general consumers is extremely limited. As a consequence, the content of this report may not be readily accessible to schoolchildren or ordinary consumers. We hope to improve this in the future.

This report will continue to evolve as a tool for communication with the public and communities concerning our corporate activities.

### Scope of this Report

**Reporting period:** April 1, 2005–March 31, 2006 (including sections on 2006 activities and future planning)

**Subject company:** Ube Industries, Ltd. and 11 major group companies  
 Four chemical factories (Chiba, Sakai, Ube, Nishioki)  
 Three cement factories (Ube, Isa, Kanda)  
 Ube Aluminum Wheel Factory, Ube Film, Ltd.,  
 Meiwa Kasei Industries, Ltd., Ube Ammonia Industry, Ltd.,  
 Ube Agri-Materials, Ltd., Ems-Ube, Ltd.,  
 Kemira-Ube, Ltd., Ube-Nitto Kasei Co., Ltd.,  
 Ube Material Industries, Ltd., Ube Board Co., Ltd.,  
 Ube Machinery Corporation, Ltd., Ube Steel Co., Ltd.

**Subject area:** Activities in Japan

- Reported data:**
- ① Data for UBE and its group companies: In principle, results for the past five fiscal years (2001–2005) and forecast performance for fiscal 2006.
  - ② Because U-Mold Co., Ltd. was absorbed by UBE in January 2005, its data from fiscal 2004 has been included with the non-consolidated data for UBE.
  - ③ Actual data for Ube-Nitto Kasei Co., Ltd. have been added, starting from fiscal 2004.
  - ④ It was decided to exclude the Nishioki Factory, Ube Agri-Materials, Ltd., Ems-Ube, Ltd., Kemira-Ube, Ltd. from the energy consumption, CO<sub>2</sub> emissions and environmental preservation cost data in the environmental accounts from fiscal 2004 onwards. This decision was based on a review of the factories and group companies covered in the report, based on UBE’s equity method ratio in Group companies.
  - ⑤ A part from environmental performance indicators, all data and statements refer to all UBE Group companies.

**Reference on guidelines:** This report was created according to guidelines set forth in “Environmental Reporting Guidelines 2003 Edition” (Ministry of the Environment), with performance data determined according to guidelines set forth in the business operators’ “Performance Guidelines 2002 Edition,” and accounting standards conforming to “Environment Accounting Guidelines 2005 Edition.”



The CSR Report Editorial Team



An editorial meeting for the CSR Report

Wings of  
technology  
Spirit of  
innovation  
**UBE**

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