UBE Group
CSR Report 2009

Focusing on Harmonious Coexistence with All Stakeholders
For Global Environmental Preservation

For the Children in the Future; for a Bright, Habitable Planet

Global expectations are growing for the roles—such as the development of environmental technologies—that companies will play through their key businesses in solving serious global environmental issues, including global warming. Since 1951, the UBE Group has been proactively implementing global environmental measures, including so-called “the Ube City’s environmental program,” which tackles pollution problems through cooperation among industry, government, academia and citizens. In addition, based on proprietary technologies that have been accumulated more than 110 years, the UBE Group has developed innovative technologies and products that contribute to environmental preservation in a variety of forms.

Under the terms of the Kyoto Protocol, Japan’s 2008–2012 target for reduction in greenhouse gas emissions was 6% (compared with 1990). In response, UBE set its own Group-wide reduction target of 12%, which it attained ahead of schedule in fiscal 2008 through such methods as saving energy, switching fuels and utilizing wastes. The Group has decided to make “living and prospering together with our neighbors” its corporate philosophy. For this reason, it deems environmental management aimed at sustainable development on a global scale to be of paramount importance for realizing “harmonious coexistence” with all stakeholders.
Striving for Sustainable Growth

With Shareholders

Improving Corporate Value by Manufacturing Products with a Global Presence

Over a period spanning 111 years, the UBE Group has been utilizing its proprietary technologies to develop the wide range of innovative products that the times have demanded. Based on this platform of accumulated technologies, UBE continues pursuing R&D on a daily basis to create new products.

Aiming for Rapid Strategic Growth Business Segmentation of Developing Businesses

Under its “Stage Up 2009” mid-term management plan, the UBE Group is breaking down each of its business segments into four portfolios: core platform, strategic growth, developing business and rebuilding businesses. The aim is to rapidly shift pharmaceuticals, specialty inorganic materials and aerospace materials—all of which have been positioned in the developing segment—to the strategic growth segment, which holds the promise of growth on a global scale.

Creating New Drugs with Proprietary Technologies

Two agents have been launched onto the market: the antiallergic agent TALION, jointly developed with Mitsubishi Tanabe Pharma Corporation, and the hypertension drug CALBLOCK, jointly developed with Daiichi Sankyo Co., Ltd. Much is expected, too, of the anti-thrombotic blockbuster drug EFFIENT (generic name prasugrel), jointly developed with Daiichi Sankyo and Eli Lilly and Company. Sales of EFFIENT have commenced in Europe and the United States, the drug having received marketing approvals from the European Commission and the U.S. Food and Drug Administration.

Orchestrating Group Strengths

Specialty organic materials, such as silicon nitride, photocatalytic fibers and high-purity calcia and magnesia, are developed by certain UBE Group companies. By accelerating collaboration between the companies and enhancing the product lineup, the aim is to increase net sales from ¥10 billion in fiscal 2007 to ¥24 billion in fiscal 2012.

Entering the Aerospace Field with Leading-Edge Materials

UBE is signing agreements with major aircraft makers covering the joint development of new materials for aircraft applications. Utilizing the advanced technologies that UBE has accumulated in the aerospace materials field and a highly heat-resistant matrix resin (jointly developed by UBE and the U.S. National Aeronautics and Space Administration), progress is being made in the development of a new heat-resistant composite material. This material, which will reduce the weight of the airframe structure around engines, is also intended to bring down costs.
Providing Customers with Safe, High-Quality Products that Have Minimal Environmental Impact

Used in a wide array of fields—from aerospace and information electronics to automobiles, social infrastructure and daily consumer items—UBE Group products are developed from a global perspective and feature a high degree of originality. These products allow the Group to develop numerous businesses in which it maintains a strong presence, both in Japan and abroad. For this reason, UBE places emphasis on safety evaluations and the safe management of substances, centering on chemicals. Furthermore, through its responsible care activities, UBE voluntarily implements measures that consider the environment, safety and health throughout product life cycles—from the development of chemical substances to product manufacture, distribution, use and disposal. At the same time, the Group constantly seeks improvements and makes concerted efforts to provide products that are safe and secure.

Fair Business Transactions with Suppliers, Product Improvement and Safety Assurance

Considering suppliers to be good business partners, UBE conducts business transactions that are fair and unbiased in accordance with its basic purchasing policies as it strives to further foster mutual understanding and trusting relations with the aim of sustaining each other’s business development. In addition, the UBE Group is working together with its suppliers—including partner companies—to strengthen its ability to increase quality and maintain safety. This is accomplished by promoting such measures as ensuring that all employees fully comprehend and comply with the Act against the Delay in Payment of Subcontract Proceeds, etc., to Subcontractors and by engaging in green procurement activities. At the same time, the Group communicates and exchanges transportation information, investigates the causes of transportation accidents and conducts disaster prevention drills for the drivers of tankers in order to improve distribution quality.

UBE aims to be a company that has earned the trust of customers and suppliers by developing safe, high-quality and environment-friendly products and technologies that enrich the lives of all people as well as by faithfully undertaking business transactions that are fair and unbiased.
Creating Wide-Ranging Employment Opportunities

Amid a diversifying employment market, the UBE Group creates wide-ranging employment opportunities, which involves not only the occasional recruitment of new graduates but also the reemployment of retired workers and the employment of people with disabilities as well as mid-career workers.

Moreover, UBE is contributing to the creation of local employment opportunities not only in Japan but also at its overseas bases, such as those in Spain, Thailand and China.

Human Resource Development and the Creation of Pleasant Workplace Environments

The UBE Group gives top priority to human resources among its management assets and is committed to developing skilled professionals. Moreover, in addition to employees maintaining their physical and mental wellbeing and the creation of pleasant workplace environments that empower active involvement, the Company works to imbue a Groupwide culture of safety through such means as environmental safety training.

Involvement with Local Society

Engaged in the materials manufacturing industry, with production facilities located in Japan and overseas, the UBE Group finds smooth, two-way communication with local society indispensable. As a result, concerning such aspects as UBE’s business description and efforts to reduce its environmental impact, the Group works to gain the understanding of local people by offering tours of factories, business sites and UBE-i-Plaza, a facility that provides comprehensive information on UBE’s operations.

In addition to taking part enthusiastically in a variety of local activities in the countries in which its bases are located—for example, by lending its support to sporting and cultural events—the Group creates many opportunities for coming into active contact with local residents and works to deepen mutual understanding.

Growing and Developing Together through Smooth, Two-Way Communication

In addition to the utilization and development of diverse human resources through its business bases in Japan and overseas, the UBE Group works to maintain a harmonious existence between its employees and local society. The Group achieves this by proactively undertaking corporate social responsibility (CSR) activities at each of its bases and through communication with the local societies that surround them.
UBE Group CSR Report 2009

Contents

Feature Article 1: Striving for Sustainable Growth
For Global Environmental Preservation 1
With Shareholders 3
With Customers and Suppliers 5
With Employees and Local Communities 7
Message from the President 11

Feature Article 2: The History of the UBE Group
UBE’s 111 Years of Business Growth 13
Corporate Profile 15

Management
Management System 17
Basic Policies for CSR 19
Corporate Governance 22
Compliance 23
Risk Management 24

Stakeholders
With Stakeholders 25
Relationship with Shareholders and Investors 27
Relationship with Customers 28
Relationship with Suppliers 30
Relationship with Employees 31
Relationship with Local Communities 34

Environment and Safety
Initiatives for Environment and Safety 41
Environmental Management 43
Measures to Prevent Global Warming 49
Management of Chemical Substances 51
Effective Use of Waste 53
Reduction of Industrial Waste 54
Measures to Prevent Air and Water Pollution 55
Occupational Safety and Health 56
Process Safety and Disaster Prevention 57

Information
Socially Valuable Products and Technologies of UBE Group 58
Site Reports 63
Third-Party Verification and Opinion 65

Editorial Policy
We began publishing our annual RC report in 1997 to introduce our environmental initiatives. We subsequently changed the name of the report to the CSR report. This year, 12 years after the very first publication of the report, we have created the UBE Group CSR Report 2009 as our fifth CSR report. In editing this CSR report, we have been committed to ensuring its accuracy and intelligibility. The 2009 edition adheres to the following policies:
• Enhance interactive communication
To clearly show how the people outside the UBE Group view the Group and to identify new CSR-related issues for the Group, we included more opinions from third parties in the report. Through this, we aim to realize interactive communication.
• Emphatically communicate the ethos of “living and prospering together with our neighbors”
In order to communicate more effectively the UBE Group’s position of aiming for sustainable growth through coexistence with each stakeholder, feature articles have been added that illustrate the Group’s stance with greater clarity.
• Create an easy-to-read page format
We structured this report to feature content and a design that are easy-to-read in order to make it satisfactory to all our stakeholders. We received certification from Color Universal Design.

Scope of This Report
Period covered:
Fiscal 2008 (from April 1, 2008 to March 31, 2009)
(The report, however, does at times refer to activities conducted in fiscal 2009 and future plans.)
Companies covered:
• The UBE Group (145 companies)
  • Of which, the following companies are covered in the reporting of major financial data (on page 16):
    Ube Industries, Ltd. and its consolidated companies (92)
    Consolidated subsidiaries: 65
    Equity method affiliates: 27
  • Of which, the following companies are covered in the reporting of environmental performance data:
    Ube Industries, Ltd.
    Three chemical factories (Chiba, Ube and Sakai)
    Three cement factories (Ube, Isa, and Kanda)
    Ube Aluminum Wheel Factory (currently Ube Aluminum Wheels, Ltd.)
    Other Group companies (10)
    Ube Film, Ltd.
    Ems-Ube, Ltd.
    Ube Ammonia Industry, Ltd.
    UBE-MC Hydrogen Peroxide, Ltd.
    Ube-Nitto Kasei Co., Ltd.
    Meiwa Plastic Industries, Ltd.
    Ube Material Industries, Ltd.
    Ube Board Co., Ltd.
    Ube Machinery Corporation, Ltd.
    Ube Steel Co., Ltd.
Note: Ube Agri-Materials, Ltd. (currently MC Ferticon, Co., Ltd.), which changed its status from a consolidated company to a consolidated company under the equity method, has fallen outside the scope of this category since fiscal 2008.

Definitions
UBE refers to Ube Industries, Ltd. (unconsolidated)
The UBE Group refers to the UBE Group companies, including Ube Industries, Ltd.
Areas covered:
This report describes the UBE Group’s activities in Japan and some locations overseas (including Thailand, Spain and China).
Statistical data published in this report:
• All statistical data and relevant descriptions published in this report, excluding the environmental performance data, cover all Group companies.
• In principle, data is for the last five years (2004 to 2008).
• The scope of data, however, does vary in places. In such cases, the specific scope is noted on the relevant page.
Reference guidelines:
This report was created in line with the Japanese Ministry of the Environment’s Environmental Reporting Guidelines Fiscal Year 2007 Version. We also referred to the Ministry’s Environmental Performance Indicators Guidelines for Organizations (Fiscal Year 2002 Version) for environmental performance data and to the Ministry’s Environmental Accounting Guidelines 2005 for environmental accounting standards.
A factory that manufactures Class C drugs
The UBE Group’s CSR Initiatives

The origins of the UBE Group can be found in a silent partnership formed under the name Okinoyama Coal Mine in 1897, with Sukesaku Watanabe as the first president. Mr. Watanabe often used the slogan, “living and prospering together,” to express the idea that the development of the company and that of the local community are equally important. Guided by this philosophy, UBE has consistently engaged in the production of highly original products and developed a wide array of new businesses. At the same time, it has contributed to society through the establishment of local infrastructure, including the construction of water supply and sewage systems, the development of schools, hospitals and electric power facilities and the building of railroads.

The UBE Group has continued to adhere to the concepts of “living and prospering together” and “creating an industry with infinite possibilities from the finite resources of coal” ever since its founding. The CSR activities undertaken by the Group originate from these beliefs.

Over its long history, the UBE Group has never wavered from its distinct philosophy and ethos. Based on this, it is our belief that the Group’s stance towards the initiatives it has undertaken over many years stems from the incorporation of CSR into its business activities.

Currently, the Group is coming together to expand its efforts related to the economy, environment and society in order to develop the high-minded ethos of “living and prospering together”—which was initially rooted in the community—into the concept of “global coexistence.”

To Foster Growth of the UBE Group

In order to facilitate future growth, the UBE Group undertakes a wide array of management initiatives. The Group also makes greater use of the strengths found in its globally recognized products and products with large shares in niche markets while constantly taking into consideration the need to undertake stable management.

In the current three-year medium-term management plan, Stage Up 2009, which we launched in fiscal 2007, we set forth the following basic policies: (1) the establishment of a platform for profitability that ensures sustainable growth; (2) the sustained improvement of financial position; and (3) the strengthening of CSR activities.

Although we are currently formulating UBE’s next medium-term management plan, the direction and ideas that must be pursued remain the same despite the dramatic changes taking place in the external environment. Focusing on the development of the chemicals business, we are increasingly taking steps to solidify core businesses, including those related to caprolactam chain and cement products. We are also further promoting the expansion of such strategic growth businesses as specialty and battery materials, striving to bring about the early strategic commercialization of developing businesses and continuing to improve UBE’s financial position. Through these measures, UBE aims to be a company that has an even greater business presence. Particularly with regard to developing businesses, we anticipate growth at an early stage in UBE’s new and original businesses in the areas of pharmaceuticals, specialty inorganic materials and aerospace materials.
Responses to Global Warming

Amid efforts to advance its basic policy of strengthening its CSR activities, as a chemical manufacturer, the UBE Group is focusing on making a contribution to the prevention of global warming as a major management issue. In addition to further bolstering its initiatives to reduce greenhouse gasses produced during business activities, the UBE Group focuses on R&D that contributes to a low-carbon society through its technologies and products.

To be more specific, the Group achieved its target of a 12% reduction in CO₂ emissions ahead of schedule in response to the Kyoto Protocol’s greenhouse gas emission reduction target of 6% (compared with the 1990 level) for Japan between 2008 and 2012. This reduction was accomplished through a Group-wide effort to conserve energy as well as to make use of substitute fuels and waste materials.

In addition, we are redoubling our efforts to conserve energy and reduce greenhouse gasses related to raw fuels procurement, manufacturing and distribution through such measures as improving energy efficiency and promoting the use of biomass.

In cooperation with Mitsubishi Corporation, Thai Caprolactam Public Co., Ltd. is currently promoting a CDM project to reduce N₂O in caprolactam manufacturing processes as its signature initiative. Owing to these efforts, Thai Caprolactam Public is expected to obtain an emission credit of approximately 530,000 tons (CO₂ equivalent) between June 2009 and the end of 2012.

Technologies and products that contribute to the environment are important. With this in mind, the UBE Group is developing systems for the purpose of creating new businesses that protect the environment. The Group also established a Global Warming Countermeasures Promotion Office in order to coordinate its wide array of responses to this phenomenon. Through these efforts, the Group is moving forward to respond to global warming and to develop products that contribute to the environment.

Community-Based Social Contribution Activities

UBE has established two foundations that boast a long history of contributing to society. The first of these is the UBE Foundation, which was established in 1959 as the Watanabe Memorial Science Foundation at the bequest of the late Takaji Watanabe (heir of Sukesaku Watanabe), the founding chairman of UBE. The Watanabe Memorial Science Foundation, which has continued to develop since its founding, was renamed the UBE Foundation in 1997 as part of celebrations to mark the 100th anniversary of the Company and will celebrate its 50th anniversary in 2009.

Desiring to develop Japan’s academic culture during his lifetime, Takaji Watanabe, who was a physician, invested his personal funds to further this cause. Building on his wishes, the UBE Foundation focuses on providing grants to exceptional researchers, academic research facilities and exchange students.

Presently the UBE Group lends its support primarily to individuals who aim to pursue academic research and deserving young medical researchers. To date, the total number of individuals who have been awarded grants reached 212.

To celebrate the UBE Foundation’s 50th anniversary in 2009, the number of grants offered was increased compared with other years, the Academic Grant Grand Prize was newly established as a special award and an academic grant award ceremony was held along with the 50th anniversary celebration in June 2009.

The second foundation is the Watanabe Memorial Culture Association, which was established in 1936 with the aim of taking over the promotion of human resource development, social education and cultural enlightenment, causes to which Sukesaku Watanabe dedicated himself for many years. Using his personal funds, Mr. Watanabe provided assistance to a wide array of community enterprises and educational activities with the purpose of enhancing the welfare of citizens and supporting the development of the local culture.

The Watanabe Memorial Culture Association is devoted to assisting local endeavors in the areas of art and culture. Examples of this include the Ube Citizens’ Orchestra, cultural education courses for local residents and the UBE Biennale, a biennial sculpture event that has the third-longest history for an organization of its kind in the world.

We began holding the UBE Group Charity Concert in 2008 featuring the Japan Philharmonic Orchestra. In addition, members of the Japan Philharmonic Orchestra performed “hands on concerts” at local junior high schools, hospitals and other facilities as part of the Watanabe Memorial Culture Association activities. Owing to the rave reviews garnered by this series of concerts, we are considering holding such concerts on a continual basis, with the next concert scheduled for October 4, 2009. These efforts stem from our desire to provide opportunities for local youth to familiarize themselves with top-quality music and, in turn, gain an affinity for Ube Industries.

The activities of both of these foundations, which have continued from early times, represent detailed initiatives for “achieving harmony with our neighbors” in a definitive manner while extending the range of various activities from Ube City throughout Japan and around the world. In addition to Japan, we are currently undertaking numerous social contribution activities at our overseas business sites that include Thailand and Spain.

The strengthening of CSR activities is indispensable to furthering the sustainable growth of UBE. Underpinned by the ethos of “living and prospering together” and “global coexistence,” we plan to continue undertaking a broad range of social contribution activities spanning Japan and the rest of the globe, beginning with the work of these foundations.

August 2009

Hiroaki Tamura
President and Group CEO, Representative Director
Corporate Philosophy

The history of the UBE Group starts with the Okinoyama Coal Mine, established 111 years ago to develop the coal fields in Ube, Yamaguchi Prefecture. With its commitment to "living and prospering together with our neighbors," the Company used the limited coal resources as a starting point to create an industry with infinite possibilities, developing a succession of new businesses to meet the needs of the times and to bring long-lasting prosperity. Unremitting self-reform, a desire to progress through original technologies, and the ideal of coexisting with all stakeholders throughout its long history—these elements make up the UBE Group’s core identity.

UBE’s 111 Years of Business Growth

1897
- Okinoyama Coal Mine is established as a silent partnership.

1914
- Ube Shinkawa Iron Works is established as a silent partnership.

1923
- Ube Cement Production, Ltd. is established.

1933
- Ube Nitrogen Industry, Ltd. is established.

1942
- Ube Industries, Ltd. is established through the amalgamation of Okinoyama Coal Mine, Ube Shinkawa Iron Works, Ube Cement Production, Ltd., and Ube Nitrogen Industry, Ltd.

1949
- Ube Industries, Ltd. is listed on the Tokyo Exchange.

1951
- Central Research Laboratory is established in Ube City.

1955
- The Ube Cement Factory and Isa Factory (currently the Isa Cement Factory) are established.

1959
- Polybutadiene factory is built in Chiba.

1964
- Kanda Cement Factory is established.

1967
- Chiba Research Laboratory is opened.

1974
- Ube-Mine Expressway, a road to which Ube Industries has been granted special access, is opened.

1975
- An NSP kiln is completed at the Isa Cement Factory.

1977
- An NSP kiln is completed at the Kanda Cement Factory.
1974
- UBE begins importing fuel coal from Australia amid a growing resurgence of coal due to the Oil Shock.

1979
- Nylon 12 resin manufacturing facility is completed.

1980
- Representative office established in Singapore (currently UBE Singapore Pte., Ltd.)
- A polynylide film manufacturing facility is completed in Ube City.
- The Ube Industries Building is completed.
- The Ube Industries Building is completed.

1983
- A hydrogen separation membrane manufacturing facility is completed.
- A quick ceramic flow manufacturing facility is completed.
- A high-purity silicon nitride manufacturing facility is completed.
- A hydrogen separation membrane manufacturing facility is completed.

1985
- UBE Europe GmbH is established.
- An L-LDPE facility is completed at the Chiba Petrochemical Factory.
- A dimethyl carbonate (DMC) manufacturing facility is completed.
- Capital investment is provided to PQM of Spain (currently UBE Chemical Europe, S.A.).

1989
- A subsidiary is established in Hong Kong (currently UBE (HONG KONG) LTD.).
- Class A drug manufacturing facility is completed.

1992
- An L-LDPE facility is completed at the Chiba Petrochemical Factory.
- A dimethyl carbonate (DMC) manufacturing facility is completed.

1993
- Capital investment is provided to PQM of Spain (currently UBE Chemical Europe, S.A.).
- A subsidiary is established in Hong Kong (currently UBE (HONG KONG) LTD.).
- Class A drug manufacturing facility is completed.

1997
- UBE celebrates its 100th anniversary of business operations.
- A production base is completed in Thailand for caprolactam, nylon and synthetic rubber.
- UBE-Mitsubishi Cement Corporation is established.
- A subsidiary is established in Hong Kong (currently UBE (HONG KONG) LTD.).
- An EUP plant commences operations

1998
- UBE-Mitsubishi Cement Corporation is established.
- A nylon resin production facility is completed in Spain (UBE Engineering Plastics, S.A.)
- A subsidiary is established in Shanghai (currently UBE [Shanghai] Ltd.).
- An executive officer system and outside director system are introduced.

2000
- UBE-MARUZEN POLYETHYLENE Co., Ltd. is established.
- A subsidiary is established in Shanghai (currently UBE [Shanghai] Ltd.).
- An executive officer system and outside director system are introduced.
- A nylon resin production facility is completed in Spain (UBE Engineering Plastics, S.A.)

2004
- TSRC-UBE (NANTONG) CHEMICAL INDUSTRIAL COMPANY LIMITED, a company that manufactures synthetic rubber, is established in China.
- The medium-term management plan, Stage Up 2009, is launched.
- UBE decides to construct a factory to manufacture 1,6-hexanediol in Thailand.

2005
- The Nantong Ube Concrete Co., Ltd. is established.

Net sales trends
UBE Group Vision
The UBE Group operates both in Japan and globally in a broad range of markets—social infrastructure, lifestyle products, automobiles, energy and environment, information electronics, pharmaceuticals and aerospace—and provides a diverse array of materials and products that demonstrate UBE’s originality. Based on the vision of “Wings of technology, Spirit of innovation. Our DNA driving our global success,” UBE will continue to create value for the future through proprietary technologies that focus on chemistry, including specialty materials and products and technologies with low environmental impact.

Business Profile
UBE supports both industry and personal lifestyles through its Chemicals & Plastics operations. Principal products include: caprolactam, a basic raw material for nylon for which UBE ranks among the world’s top three producers; nylon resins used as an engineering plastic for such products as automotive components and food product wrapping films; synthetic rubber (butadiene rubber) for which UBE boasts Asia’s top production capacity and which are used by all tire manufacturers in Japan; and ammonia—a raw material of caprolactam—and other industrial chemicals used to produce a wide range of chemical products.

Fiscal 2008 Topics
- Completion of a joint venture butadiene rubber production facility in Nantong City, China
- Memorandum of agreement signed with PTT Public Company Limited (PTT) to study the future establishment of a broad range of joint chemicals businesses in Thailand

Chemicals & Plastics
UBE stands behind the development of electronics with high-performance products such as super-reheat-resistant resin polyimide, essential for circuit substrates in flat panel displays, as well as electrolytes and separators used in lithium-ion batteries. UBE offers products such as separation membranes and silicon nitride that respond to needs related to the environment and safety, while providing high-value-added fine chemicals, active pharmaceutical ingredients and intermediates, all of which fall into the category of global niche products. Such a distinctive product portfolio, coupled with our proprietary technologies, empowers us to better contribute to the development of society.

Fiscal 2008 Topics
- Completion of facilities to increase production of silicon nitride
- Decision made to construct a new 1,6-hexanediol production facility in Thailand
- Agreement with major aircraft manufacturer to collaborate on R&D of new materials technology for aerospace applications
- The European Commission and the U.S. Food and Drug Administration (FDA), in February 2009 and July 2009, respectively, approved EFFIENT (prasugrel), an oral antiplatelet agent discovered by Ube Industries and Daiichi Sankyo Co., Ltd., and co-developed by Daiichi Sankyo and Eli Lilly and Company.
- Completed the 6th production facilities for separators.

Specialty Chemicals & Products
UBE is vital to the establishment of social infrastructure. By accepting a variety of waste materials, including soil from construction, ash from incinerated urban trash and plastics to be used as raw materials or fuel, UBE can make a major contribution to the creation of a recycling-based society. In addition, as a producer of a comprehensive range of construction materials, UBE offers a diverse lineup of products, including materials for flooring, plastering, waterproofing, repairs and other applications, that meet a wide range of the construction industry needs.

Fiscal 2008 Topics
- Waste processing 3rd facilities for fuel completed at Isa-Cement Factory

Cement & Construction Materials
UBE brand machinery, as represented by die-casting and injection molding machines that have earned accolades both in Japan and overseas, feature high reliability backed by UBE’s cutting-edge proprietary technology. UBE aluminum wheels contribute to increasingly lightweight vehicles and are recognized for their high performance and quality. These aluminum wheels are primarily equipped on Japanese luxury and hybrid cars.

Fiscal 2008 Topics
- Ube Machinery Co., Ltd. launched “MDS-V Series,” a line of next-generation all electric injection molding machines
- Decision made to spin off the North American aluminum wheel business and to undertake a corporate separation of the business in Japan

Machinery & Metal Products
In the coal business, which steadily supplies users with overseas coal, UBE boasts Japan’s top range of coal storage capacity. UBE has established its own energy infrastructure with its in-house power plants supplying electricity used for its business operations. Moreover, we are implementing new energy strategies, including the development of an independent power producer (IPP) business. In addition to this, through the implementation of the ground breaking waste recycling system business and the introduction of biomass fuels in its IPP business, both of which are expected to support a recycling-based society, UBE is working to reduce the burden that human activities place on the global environment.

Energy & Environment
- Synthetic Rubber
- Caprolactam
- Nylon resins
- Industrial chemicals
- Specialty products
- Polylactide
- Battery materials (electrolytes and separators)
- Semiconductor-related and electronics materials (high-purity chemical products and optic fiber related)
- Gas separation membranes
- Ceramics
- Telecommunications devices
- Fine chemicals
- Pharmaceuticals (active ingredients, intermediates)
- Cement & ready-mixed concrete
- Recycling of resources
- Building materials (self-lewelling, plastering and waterproofing materials)
- Limestone
- Calcium, magnesia
- Specialty inorganic materials
- Machinery
- Molding machines (die-casting and injection molding machines)
- Industrial machinery (transportation equipment, milling machines and crushing machines)
- Bridges and steel structures
- Steel-making products
- Aluminum wheels
- Coal
- Electric power

Corporate Profile
Company Name: Ube Industries, Ltd.
Founded: June 1, 1897
Consolidated: March 10, 1942
President and Group CEO: Hiroaki Tamura
Capital: ¥58.4 billion (as of March 31, 2009)
No. of Employees: 11,264 (consolidated)
3,672 (unconsolidated)
(as of March 31, 2009)
Management System

The UBE Group is committed to achieving sustainable growth for the Group and society at large and regards its Basic Policies for CSR as a mainstay of its business activities. The Group also makes continuous efforts to ensure appropriate information disclosure, thereby building even stronger bonds of trust with its stakeholders, including shareholders, customers, suppliers, employees and local communities.

Regarding corporate social responsibility in terms of the economy (management), the environment and social ties, UBE will:

- Continually improve profits and earnings and maintain a sound financial position in order to increase corporate value
- Provide products, services, and systems that contribute to safety and the environment, reduce the use of harmful materials and waste, and institute policies for the prevention of global warming in order to contribute to the conservation of the global environment
- Establish compliance procedures to improve corporate governance and create a better working environment as a part of our activities to contribute to society

Established July 2005
The UBE Group, founded more than 110 years ago, established its corporate philosophy of “living and prospering together with our neighbors” well before the term “CSR” took root. The Group has grown and developed over the years together with various parties. In 2005, UBE established its basic CSR policies and upgraded its previous RC report into a CSR report, making this the fifth report published.

As mentioned on page 21, in April 2008, the Group CSR Committee was launched with the goal of further strengthening the CSR promotion system. Under this committee are various other committees that deal with a variety of issues. Recognizing that the foundation for the survival of the Company is the continuous improvement of profitability along with the fulfillment of the Company’s corporate social responsibilities, such as environmental protection and compliance, the UBE Group has built and implemented a management system.

Although there are still many things that have yet to be accomplished, based on our record over the past year, we have made further headway in creating a more deeply rooted sense of CSR.

As one part of our past year’s Crisis Management Committee activities, we focused on formulating a business continuity plan (BCP) that we are happy to report functioned effectively in response to the recent new strain of influenza.
Further Improving the System to Strengthen CSR Activities in Line with the Basic Policies for CSR

In April 2008, we established the Group CSR Committee and the CSR Department to enhance our system for promoting CSR activities. Through these organizations, we are moving ahead to strengthen CSR activities, which is one of the basic policies in our medium-term management plan.

Significance of the UBE Group CSR Matrix

The UBE Group is conducting its CSR activities in line with its Basic Policies for CSR, regarding the fulfillment of CSR as an integral part of its management. Based on this concept, the Group CSR Committee (chaired by President Tamura of UBE) has determined practical CSR-related issues in the Group’s corporate activities in a table called a “CSR matrix.”

The CSR matrix shows the targets to be achieved by the directors and employees of the UBE Group by CSR item and by stakeholder. We will make all members of the Group aware of this CSR matrix and ensure that all the departments of the Group perform their duties in line with it. To this end, we will annually monitor the progress made toward the achievement of the targets shown in the matrix.

UBE Group’s CSR Mission

To increase the corporate value and contribute to stakeholders through fair corporate activities, and to maintain sustainable growth and harmoniously coexist with society on a long-term basis

Global Environment
- Promote corporate activities to reduce environmental impact with the goal of establishing a recycling-based society
- Product development based on the UBE Group’s proprietary technologies that help protect the global environment through CO2 emission reduction, recycling, water purification and energy conservation

Shareholders
- Continuous improvement of corporate value
- Stable and appropriate provision of dividends
- Appropriate information disclosure

 Customers
- Provision of products and services that are safe, of high quality and useful, at reasonable prices
- Prompt response to customer needs

Suppliers
- Fair and unbiased trade

Employees
- Appropriate salaries
- Stable employment
- Human resource development
- Sharing of information and targets
- Support for higher quality of life

Local communities and government
- Stable and fair employment
- Appropriate tax payment
- Contribution to and dialogue with the local communities

Customers
- Provision of products and services that are safe, of high quality and useful, at reasonable prices
- Prompt response to customer needs

Suppliers
- Fair and unbiased trade

Employees
- Appropriate salaries
- Stable employment
- Human resource development
- Sharing of information and targets
- Support for higher quality of life

Local communities and government
- Stable and fair employment
- Appropriate tax payment
- Contribution to and dialogue with the local communities
UBE Group’s CSR Matrix (Items for medium- and long-term initiatives by stakeholders)

<table>
<thead>
<tr>
<th>Basic Policies</th>
<th>Items for medium- and long-term initiatives</th>
<th>Group-wide organization</th>
<th>Primary departments in charge</th>
</tr>
</thead>
</table>
| Corporate governance and internal control | • Enhancement of corporate governance and internal control  
• Stable and appropriate provision of dividends  
• Improvement of financial structure | General Meeting of Shareholders, Board of Directors, internal control system, outside directors, Group Strategic Management Committee, Group CSR Committee and others | Corporate Planning Dept., Auditing Dept., CSR Dept. and Internal Control System Group |
| Customer | • Assurance of fair trade and competition  
• Formulation of a business continuity plan (BCP) | | |
| Supplier | • Fair and unbiased purchasing  
• Establishment of relations of trust | | |
| Employee | • Awareness of management policies  
• Better understanding of CSR activities  
• Business performance based on assigned roles  
• Loyalty to the organization (through stock options, etc.) | | |
| Local community and government | • Appropriate tax payments  
• Appropriate political donations | | |

Compliance

| Shareholder | • Prevention of insider trading  
• Appropriate disclosure of negative information | Group CSR Committee, Compliance Committee, and Restricted Cargo and Export Committee | CSR Dept., Legal Dept., Corporate Planning Dept. and Intellectual Property Dept. |
| Customer | • Compliance with related laws and regulations, including the Antimonopoly Act and the Construction Business Act  
• Strict confidentiality of customer information, etc. | | |
| Supplier | • Respect for intellectual property  
• Compliance with related laws and regulations, including the Act against the Delay in Payment of Subcontract Proceeds, etc., to Subcontractors and the Law for Securing the Proper Operation of Worker Dispatching Undertakings and Improved Working Conditions for Dispatched Workers | | |
| Employee | • Compliance education based on the Action Guidelines for Business Conduct, etc., and improvement of the educational system (for e-learning, etc.) | | |
| Local community and government | • Compliance with related national laws, regulations and ordinances, more stringent prefectoral standards and other agreements | | |

Environment, safety, and quality

| Shareholder | • Promoting better understanding of environment-, safety-, and quality-oriented management | Group Environment and Safety Committee, Group Product Liability and Quality Committee and Crisis Management Committee | Environment & Safety Dept., REACH Promotion Office, Global Warming Countermeasures, Promotion Office and General Affairs Dept. |
| Customer | • Development and provision of products and services that help reduce environmental impact  
• Provision of high-quality and safe products and services  
• Compliance with related laws and regulations | | |
| Supplier | • Implementation of more measures for the reduction of environmental impact  
• Clarification of safety and quality requirements  
• Promotion of green supply and purchasing | | |
| Employee | • Improved education and enlightenment on the environment, safety and health, quality and energy conservation  
• Creation and provision of a safe and comfortable workplace | | |
| Local community and government | • Compliance with environment-, product- and service-related laws and regulations  
• Proactive measures to reduce environmental impact | | |

Information disclosure and communication

| Shareholder | • Disclosure of information about management status, CSR, and risks  
• Appropriate information provision to institutional investors and analysts  
• Organization of a general meeting of shareholders in an open manner | Group CSR Committee and Information Security Committee | CSR Dept., Investor Relations & Public Relations Dept., Information System Dept., Environment & Safety Dept. and Ube Corporate Service Dept. |
| Customer | • Provision of appropriate information about products, services and safety | | |
| Supplier | • Clear statement of procurement policies  
• Promotion of communications | | |
| Employee | • Promotion of in-house communications  
• Disclosure of information about working conditions  
• Management of information security and protection of privacy  
• Promoting better understanding of the treatment of intellectual property rights | | |
| Local community and government | • Promoting better communication with the local community and related organizations (through the RC Regional Dialogue and UBE I Plaza, etc.)  
• Establishment of favorable relations with mass media companies | | |

Human rights and labor

| Shareholder | • Promoting better understanding of and increased support for human rights | Personnel Policy Committee | Human Resources Dept. |
| Customer | • Provision of advertisements that are not disagreeable to consumers | | |
| Supplier | • Provision of equal trading opportunities | | |
| Employee | • Improvement of the personnel system to enable a variety of employees to display their abilities  
• Improved health and safety at workplaces and better health management by employees  
• Sincere dialogue with employees and the labor unions  
• Discontinuance of discriminatory employment practices and provision of equal employment opportunities  
• Education on respect for human rights | | |
| Local community and government | • Creation of employment  
• Compliance with labor-related laws and regulations  
• Discussion and dialogue toward the creation of a society with high respect for human rights | | |

Social contribution

| Shareholder | • Promoting better understanding of and increased support for corporate social contribution activities | Group CSR Committee and CSR Promotion Committee | CSR Dept., Ube Corporate Service Dept. and General Affairs Dept. |
| Customer | • Promoting better understanding of corporate social contribution activities | | |
| Supplier | • Promoting better understanding of corporate social contribution activities | | |
| Employee | • Encouragement of and support for voluntary participation in social activities | | |
| Local community and government | • Promotion of social contribution activities and improvement of the relevant system (through the UBE Foundation, etc.)  
• Better understanding of corporate social contribution activities | | |

Note: Please refer to Initiatives for Environment and Safety Items beginning on page 41 regarding items of the UBE Group global environmental initiatives.
Management System

Basic Policies for CSR

Enhancing CSR Promotion

In line with its Basic CSR Policies, the UBE Group has been strengthening its system to foster environmental, safety, and compliance measures while continuously improving its profitability and financial position to increase its corporate value.

In its medium-term management plan, Stage Up 2009, which was launched in fiscal 2007, the Group set forth the following basic policies: (1) establishment of a platform for profitability that ensures sustainable growth; (2) sustained improvement of financial position; and (3) strengthening of CSR activities. Based on these policies, we worked hard to thoroughly implement relevant activities. As a result, we founded the Group CSR Committee (chaired by President Tamura of UBE) on April 1, 2008. Under the Group CSR Committee are five committees, including the CSR Promotion Committee and the Compliance Committee, which manage and facilitate social contribution activities, along with the Information Security Committee. Moreover, the CSR Department has been newly established as an organization to support the CSR promotion system.

Under this new system, the UBE Group has been implementing its CSR measures based on the previously mentioned CSR matrix, supported by the aforementioned committees and the Group Environment and Safety Committee. We are aiming to increase our corporate value through fair corporate activities and win more trust from our stakeholders, while achieving sustainable growth and harmonious coexistence with society on a long-term basis.

Group CSR Committee

Under the Group CEO (the President of UBE), in addition to the existing Group Environment and Safety Committee, the UBE Group established the Group CSR Committee as a Group management committee and is expanding its business activities based on the Basic CSR Policies.

CSR Promotion Committee

The CSR Promotion Committee is in charge of the UBE Group’s social contribution activities and CSR reports. Supervised by the director in charge of CSR and in cooperation with the CSR Promotion Secretariat, the Committee is collecting data on the Group’s CSR activities and implementing measures to boost such activities.

CSR Promotion Secretariat

<table>
<thead>
<tr>
<th>CSR Promotion Secretariat (Chaired by Director in Charge of Group CSR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretariat (Supervised by):</td>
</tr>
<tr>
<td>CSR Department</td>
</tr>
</tbody>
</table>

- **Operating Sites**
  - Organic Chemistry Research Laboratory
  - Chiha Petrochemical Factory
  - Ube Chemical Factory
  - Sakai Factory
  - Ube Cement Factory
  - Kasa Cement Factory
  - Randa Cement Factory
  - Ube Machinery Corporation, Ltd.
  - Ube Aluminum Wheels Ltd.

- **In-House Companies and Divisions**
  - Chemicals & Plastics Company
  - Specialty Chemicals & Products Company
  - Cement & Construction Materials Company
  - Machinery & Metal Products Company
  - Energy & Environment Div.

- **Group companies**
  - Investor Relations & Public Relations Dept.
  - Corporate Planning Dept.
  - Human Resources Dept.
  - General Affairs Dept.
  - Legal Dept.
  - Environment & Safety Dept.
  - Planning & Control Dept., Corporate Research & Development
  - Procurement & Logistics Div.
  - Ube Corporate Service Dept.
  - CSR Promotion Secretariat

Poster of the winning “compliance slogan” received by the Compliance Committee
Establishing a Corporate Governance System to Further Increase the UBE Group’s Corporate Value

Through the establishment of a corporate governance system based on transparent and objective management as well as appropriate supervision, we can increase corporate value on a stable and long-term basis while fulfilling our mission to foster the trust of all stakeholders.

Initiatives to Establish and Maintain Corporate Governance

**Board of Directors**

Two outside corporate directors have been appointed to the Board of Directors to bring a third-party perspective to decision-making, thereby ensuring transparency and objectivity in management. Composed of eight corporate directors, of whom two are appointed from outside the Company, the Board of Directors is chaired by a director who, in principle, is not an executive officer. Currently the Board is being chaired by an outside corporate director. In addition, UBE has positioned a Nominating Committee and an Evaluation and Compensation Committee as subsidiary entities of the Board of Directors, allowing greater flexibility in the activities of the Board. Both of the committees are chaired by outside directors.

**Executive Officer System**

In June 2001, UBE adopted an executive officer system with the aim of separating governance and management functions. The management team currently consists of 24 executive officers, of whom six are also directors. Executive officers carry out business operations in accordance with management policies determined by the Board of Directors, using authority delegated to them by the President & Representative Directors.

**Audit System**

Internal audits are conducted by UBE’s Auditing Department, which reports directly to the CEO. Audits cover the entire UBE Group, including UBE’s overseas subsidiaries. Aspects checked include internal control and compliance with laws and regulations as well as adherence to manuals.

The corporate auditor organization consists of four corporate auditors, of whom two are appointed from outside the Company. The task of 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.

The corporate auditors and the Auditing Department regularly exchange information, and when the auditors conduct audits, some of the Auditing Department staff will accompany and support them as required. The auditors and the Auditing Department thus work in close cooperation with each other. The corporate auditors also regularly meet the independent auditors to hear about their auditing plans and to obtain information about the implementation status.

UBE promotes transparent and objective management through each of the abovementioned organizations’ functioning in close coordination with each other. (Please refer to the chart below)

---

**Group Corporate Governance Structure**

---

**Decision-Making System**

**Board of Directors**

On behalf of shareholders, the Board of Directors discusses and makes decisions on the issues provided for by the Companies Act, the basic policies of the Company and important enforcement issues from medium- to long-term perspectives.

**Group Strategic Management Committee**

The Group Strategic Management Committee is responsible for discussing and making decisions on key matters concerning resource allocation, items that need to be adjusted from an overall Group perspective, and other key matters that affect the Group as a whole in accordance with the Group Management Guidelines and Group Strategic Management Committee rules.

**Corporate Operating Committee and Division Operating Committee**

The Corporate Operating Committee and the Division Operating Committee are responsible for discussing and making decisions on key matters, such as business strategy, at the corporate level and divisional level, respectively. They engage in these activities for Ube Industries and other UBE Group companies in accordance with the Group Management Guidelines and rules that govern their operation.
Compliance: A Prerequisite for Trusted Companies

We are committed to compliance in our management, based on the recognition that compliance is a prerequisite for a company to fulfill its social responsibility.

Measures to Ensure Effective Compliance

The UBE Group considers compliance to be a prerequisite for any company seeking to fulfill its social role. This is in addition to providing society with a variety of benefits, such as useful products and services, and ensuring employment. Business activities that are found to have not complied with laws and regulations and social norms, however, will greatly undermine society’s trust in a company.

The UBE Group implements measures to enhance its system—headed by its president and designed to ensure compliance—with the aim of fostering awareness with regard to compliance on the part of every company officer and employee. In addition, the UBE Group has established points of contact both within and outside the Company, in order to quickly identify problems originating with its employees.

In addition, we have been holding e-learning seminars and conducting compliance audits since fiscal 2006 to ensure the effectiveness of our compliance system.

- **Personal Action Guidelines and Basic Policy with Regard to Anti-Social Elements**
  
  Personal Action Guidelines—booklets in which the behavioral norms that should be adhered to are set out—are distributed to UBE Group company officers and employees with a view to promoting thorough understanding. In addition, we formulated the Basic Policy with Regard to Anti-Social Elements to emphatically clarify the Group’s intention to avoid any kind of relationship with such parties.

- **Enlightenment by e-Learning**
  
  The UBE Group holds annual online training sessions, covering wide-ranging compliance themes and geared toward all company officers and employees.

- **Compliance Training**
  
  Training sessions for new employees and newly appointed company officers as well as explanatory meetings on such subjects as the Act against the Delay in Payment of Subcontract Proceeds, etc., to Subcontractors are held as necessary.

- **Awareness Surveys**
  
  The UBE Group commissioned an external organization to conduct a survey to gauge compliance awareness among company officers and employees (January 2009). It is envisaged that, after analysis, the results of the survey will help future efforts.

- **Compliance Slogans**
  
  In order to enhance compliance awareness among employees, the UBE Group has collected compliance slogans from its officers and employees. These slogans are made into posters that are displayed at all business segment sites and Group company business offices and on factory floors.

Overview of Systems Ensuring Compliance

- **Compliance Officer (CO)**
  
  Two directors have been appointed as Compliance Officers (one of whom was appointed as Chief Compliance Officer). Their task is to promote and insure 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 (a consulting lawyer) 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 CO.

Compliance System
We are improving and strengthening our risk management system so that we can implement optimal measures to identify and deal with risks that might have a serious impact on our management.

Companies conduct activities to make maximum profit, while dealing with a range of risks. The UBE Group is improving its risk management system so that it can implement appropriate measures to identify and assess the probability and impact of risks that might prevent the attainment of its business objectives.

In order to deal with specific types of risks, we have established the Group Environment and Safety Committee and the Group Product Liability and Quality Committee. For the entire Group, these two committees formulate and actively implement policies concerning the environment and safety, and product safety, respectively.

In addition, we have established the following committees to deal with individual risk categories.

- **Information Security Committee**
  
  Due to the digitization of a wide range of information, companies are facing the risk of information leakage, falsification and loss, and these risks are having a serious influence on their corporate activities.

  The UBE Group has established its information security policies to ensure information security, and it is raising employees’ awareness of these policies and monitoring their compliance. We also established information security rules and regulations to ensure appropriate information management.

- **Restricted Cargo and Export Management Committee**
  
  We constantly reinforce awareness within our Group of the fact that the basic requirement of export management is to prevent the illegal export or supply of goods and technologies that are subject to export controls under laws and regulations designed to maintain international peace and stability, such as Japan’s Foreign Exchange and Foreign Trade Act.

- **Crisis Management Committee**
  
  Companies face various risks beyond national boundaries. These risks include labor accidents at factories, other workplace accidents, environment- and safety-related accidents, disasters, noncompliance with laws and regulations, sexual harassment and personnel- and labor-related problems, such as human rights issues.

  The UBE Group established crisis management regulations, a crisis management manual and other measures to respond to emergencies that could occur both in Japan and overseas. It also responds in a rapid and appropriate manner to a variety of incidents, including major accidents, disasters and scandals, while maintaining systems that minimize the impact of such incidents on business operations. Moreover, the Overseas Crisis Management (OCM) committee has been established within the Crisis Management Committee to take charge of crisis management for employees who are on business trips or working overseas.

The UBE Group has formulated a BCP to ensure that it can promptly make necessary responses and smoothly resume its business operations in the event that a large earthquake rated at 6 or higher on the Japanese earthquake scale takes place in the Tokyo metropolitan area and causes serious damage to the functions of its head office.

In December 2008, the Tokyo Head Office, the Ube Head Office and the Chiba Petrochemical Factory participated in the first BCP field drill in anticipation of an earthquake occurring directly below the Tokyo Metropolitan area.

UBE began training employees to operate the system it introduced to confirm the safety of employees and their families in the case of a disaster, while equipping employees with pocket-sized earthquake-response manuals and disaster helmets.

The UBE Group has finalized Group-wide policies for the emerging threat of new influenza strains and is thoroughly undertaking preventative measures in accordance with such policies. The Group also formulates BCPs that provide detailed responses to such threats at each site.
In order to fulfill its corporate social responsibilities, the UBE Group will abide by its Action Guidelines for Business Conduct and work to gain the trust of its stakeholders.

**Chapter 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.

**Chapter 2 The Law and the Corporation**
We will comply with Japanese and foreign laws and regulations and corporate regulations, behave as a sound member of society, have absolutely no involvement nor business relations with anti-social elements and refuse any unreasonable demands from said elements.

**Chapter 3 Business Activities and Value Creation**
We will develop and supply useful and safe technologies, products and services that allow us to earn the trust of society.

**Chapter 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.

**Chapter 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.

**Chapter 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.

**Chapter 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.

**Chapter 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.

**Chapter 9 Establishing Corporate Ethics**
We will cooperate closely with UBE Group companies, suppliers and customers to establish corporate ethics based on these Action Guidelines.
Interactive Communication through IR Activities

UBE always conducts its IR activities in good faith, striving to promote understanding of the UBE Group’s management strategy and business conditions in the capital market and to implement transparent management in order to earn the trust of the market. To this end, we are disclosing related information in a timely, appropriate and fair manner.

In addition, we are actively increasing opportunities for interactive communication with market participants such as shareholders, investors, and securities analysts, thereby promoting mutual understanding and incorporating market perceptions and evaluations into our management.

Based on the aforementioned IR policy, we are holding briefing sessions and tours of our factories that target both domestic and foreign investors as a means to directly communicate with them. We are also dispatching a range of information through our website.

The following were the main IR activities conducted in fiscal 2008.

- Results briefings for institutional investors and securities analysts (Held after full-year results were announced)
- Web-based conferences for institutional investors and securities analysts (Held on the day that quarterly results were announced)
- Overseas IR (Individual visits to institutional investors in Europe, the United States and Asia: Four times)
- Small meetings held with President (Three times)
- Factory visits (Four times, including overseas factories)
- Individual interviews with institutional investors and securities analysts (Approximately 250 per year)

For shareholders, we began publishing a semiannual financial report entitled, Stockholder Communication, in fiscal 2007 to replace conventional business reports. We use this report to make individual shareholders more aware and to introduce UBE’s business details and strategies in a more intelligible manner. UBE will continue its commitment to timely, appropriate and fair information disclosure, and it will enhance interactive communication with investors.
The EU's REACH Regulation

Under the REACH regulation, all chemical products manufactured in or exported to the EU must be registered again after undergoing toxicity and risk assessments. Among the products made by the UBE Group, the regulation applies to those exported to the EU from Japan and Thailand as well as to those manufactured by Group companies in Spain. The pre-registration period was completed by November 30, 2008. The UBE Group will eventually complete the registration process for all of its products in 2018.

To comply with the REACH regulation, the UBE Group has to register a number of products. In order to ensure the successful completion of the registration process, which will extend over a long period, we established the REACH Promotion Office. This Office will take charge of the registration operations and lead the entire UBE Group toward the smooth completion of the process.

In fiscal 2008, in addition to confirming the products exported to the EU and the number of product items, along with conducting pre-registration procedures after having decided to register, we conducted supply chain and usage surveys and reconfirmed in-house test data. For some products, we completed early registration. From here on, we will jointly register with other companies in the consortia.

Through these registration procedures, we will ensure people’s health and environmental safety from chemical substances, and accurately convey to customers the information required for risk management.

Material Safety Data Sheet (MSDS)

To ensure the safe use of our chemical products, we have prepared MSDSs for all of our products, and we disclose them on our website and through other media. The MSDSs are also posted on the Group’s intranet so that all the employees can share information on product safety and the safe handling of products. We have set the criteria for MSDSs in our Group regulations so that new information on the risks and toxicity of our products and on changes made to the relevant laws and regulations is constantly collected and incorporated into the data sheets. In fiscal 2008, we updated or newly created MSDSs, including GHS and foreign language versions, for more than 200 products.
Warning Labels

We clearly state the precautions for safe handling by affixing warning labels to the containers of our products. We are introducing GHS labeling as well as the Container Yellow Card\(^5\) labeling system promoted by the Japan Chemical Industry Association (JCIA).

Safety of Transportation

The Transportation Subcommittee, which is placed under the Group Product Liability and Quality Committee, makes an annual action plan, based on which the regional transportation councils are implementing measures to prevent transportation accidents and improve the quality of transportation.

The UBE Group is making concerted efforts with its partner companies to ensure the safety of its transportation activities. Specifically, we regularly check whether Yellow Cards\(^6\) (emergency communication cards) are carried by our truck drivers, communicate and exchange transportation information among ourselves, examine the causes of transportation accidents, and conduct disaster prevention drills for the drivers of tankers.

Participation in Chemical Safety Management Initiatives in Japan and Overseas

We have participated in the Japan Challenge Program\(^7\) and have already submitted a written plan, which includes the presently available safety information and additional test results regarding oxalic acid and 12-aminododecanoic acid.

Through the JCIA, we also actively participate in and support the ICCA\(^8\) in its voluntary Long-range Research Initiative (LRI), which focuses on the effects of chemical substances on human health and the environment.

Response to Green Procurement\(^9\) by Customers

Consistent efforts are made to reduce the use of harmful materials in all products and incorporate design aspects that make for easy recycling, particularly in the electronic and electrical equipment manufacturing industry. As a supplier of both raw and processed materials, UBE takes a number of positive approaches to help its customers realize green procurement. As UBE itself is required to appropriately manage procured raw materials, it has established its own unique standards to promote the control of the substances contained in procured parts/raw materials.

Quality Control Activities

The UBE Group is systematically building a quality management framework and conducting activities to improve the quality of its products, based on its quality management system, which complies with relevant ISO standards. In fiscal 2006, we launched quality and product safety audits. Subsequently, in fiscal 2008, we implemented measures to manage substandard products and deal with complaints concerning our products in a more appropriate manner, to manage the resulting cost loss and to ensure product safety as part of our compliance measures. We will raise customer satisfaction by preventing these quality and product liability issues.

\(^5\) Container Yellow Card (labeling system): A warning label that includes an emergency measure guideline number and UN number, used in the event of an accident under conditions where other information formats would be impractical because of mixed loading or small order shipments.

\(^6\) Yellow Card: Emergency card on which the product name, properties, handling methods, emergency measures and emergency contact number are entered in case of transportation accidents.

\(^7\) Japan Challenge Program: Chemical safety inspection program launched in Japan in June 2005 to gather information on the safety of existing chemical substances through industry-government collaboration and to disseminate that information to the public.

\(^8\) ICCA: International Council of Chemical Associations

\(^9\) Green procurement: Procurement of materials conducted by companies based on their individual safety and environmental criteria established to meet the requirements of relevant legal regulations, including the EU RoHS Directive that restricts the use of certain hazardous substances in electrical and electronic equipment.
Dealing with Suppliers in a Fair and Unbiased Manner Based on Free Competition

The UBE Group treats suppliers as good business partners and is committed to dealing with them in a fair and unbiased manner to mutually achieve sustainable development.

---

**Basic Purchasing Policies**

- **Fair and unbiased transactions**
  We are committed to treating our suppliers in a fair and unbiased manner based on free competition and constantly search for opportunities to deal with new suppliers. We will cooperate with suppliers on a fair and equal footing and promote mutual understanding and relations of trust over a long-term basis.

- **Objective selection of suppliers**
  We will choose suppliers from the viewpoint of economic rationality by comprehensively examining their quality, prices, and delivery schedules.

- **Compliance with laws and regulations, and confidentiality**
  We will comply with all related laws and regulations and with social norms, and we will protect all the confidential information obtained in our purchasing activities.

- **Green procurement and purchasing**
  We will choose environment-friendly products in our purchasing activities.

---

**UBE engages in purchasing activities that thoroughly adhere to its purchasing policies.**

**Approach to the Act against the Delay in Payment of Subcontract Proceeds, etc., to Subcontractors**

We familiarize all employees on this Act by drafting Q&A and other documents that are easy to comprehend. In addition, we hold individual briefing sessions for each of the related in-house departments and Group companies, thereby ensuring that they understand and comply with the provisions.

**Approach to Green Purchasing**

In line with the Law on Promoting Green Purchasing, the UBE Group encourages its employees to choose eco-friendly products in purchasing stationary goods, paper and work uniforms. We aim to increase the use of eco-friendly copy paper to 100%, and soybean ink is used to print this CSR report on paper certified by the FSC. Through these efforts, the UBE Group’s green purchasing rate has improved to 63%.

---

**Staff Message**

Endeavoring to Make Procurement Fair, Unbiased and Transparent

Based on its corporate philosophy and basic purchasing policies, the UBE Group constantly strives to conduct business transactions in an appropriate manner. Moreover, the Group aims to establish and maintain sound and equal partnerships in its business activities by always dealing with all suppliers in an equal, fair and sincere manner. This is based on the idea that our business activities cannot be developed without gaining the cooperation and support of suppliers. UBE aims to build further on this relationship of trust by continuing to undertake procurement activities that are fair, unbiased and transparent. With this in mind, we would like to thank our suppliers for their ongoing support.

Harunobu Maeda
Raw Fuel Group, Procurement Department, Procurement & Logistics Division

---

**Glossary**

Glossary

---

- *1 Green purchasing: To purchase products and services that have minimal environmental impact from suppliers who are committed to reducing their environmental impact, considering not only the quality and price of the products, but also the environment
- *2 FSC: Forest Stewardship Council

---

**UBE Group CSR Report 2009**

30 www.ube-ind.co.jp/english

---

**With Stakeholders Relationship with Suppliers**
Employee Diversity and Helping Them Exercise Their Respective Abilities

Viewing human resources as our most valuable management assets, we stress human resource development through the employment of a wide range of talent and the enhancement of our training system.

Diversification of Employment

Reemployment System
In fiscal 2006, the UBE Group introduced a reemployment system for retired workers so that they can pass down their skills and abilities, mainly in the area of human resource development. The reemployment period is set at one year, and can be extended each year. In fiscal 2008, we reemployed about 60% of those retired.

Employment of People with Work Experience
In order to have human resources with a variety of skills and experience, we actively employ mid-career workers. The number of mid-career workers employed by the UBE Group—mainly those having expertise in technologies and knowledge and for which Group human resources are insufficient—has been increasing year by year. After entering the Group, these mid-career workers exercise their abilities by using the work experience gained at the workplaces to which they were assigned in the past.

UBE’s Employment Status

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>New graduates</td>
<td>124</td>
<td>131</td>
<td>148</td>
</tr>
<tr>
<td>New graduates deployed as generalists</td>
<td>49</td>
<td>46</td>
<td>53</td>
</tr>
<tr>
<td>Mid-career employees</td>
<td>63</td>
<td>107</td>
<td>100</td>
</tr>
<tr>
<td>Percentage of people with disabilities (annual average (%))</td>
<td>2.11</td>
<td>2.09</td>
<td>2.03</td>
</tr>
</tbody>
</table>

Note: The number of new graduate employees is the fixed number of new employees who joined the company in April, and the number of mid-career employees is the number of employees for each full fiscal year.

Employment of People with Disabilities
In order to promote the employment of people with disabilities across the Group, we organized a network to support the employment of people with disabilities, leveraging the relevant expertise accumulated in our special-purpose subsidiary, named Libertas Ube, Ltd. (established in April 1991).

In March 2009, Libertas Ube, Ltd. acquired Certification of Good Standing as an Employer of Persons with Disabilities (Heartfelt Ribbon Mark). Libertas Ube has been highly commended for its long efforts in promoting the employment of persons with disabilities and is one of 16 companies in Japan that has been granted certification. Centered on Libertas Ube, we will continue to promote the employment of persons with disabilities throughout the Group.

Addressing Human Resource Development

Human Resource Development and Personnel System
The UBE Group gives top priority to human resources among its management assets, and it is committed to developing highly skilled professionals who can act independently and produce results. The basic image that the UBE Group promotes for individual employees is that of someone who has unparalleled skills, sets their own goals, works independently and takes on new challenges while being unafraid of change.

In order to develop superior human resources, we must enhance development in the following key areas: 1) On-the-Job Training (OJT); 2) Instructor-Led Training (Off-the-Job Training); and 3) Self Improvement Support Programs. At the same time, for career development, we have instituted a support system so that all UBE employees can fully exercise their abilities.
their abilities in carrying out their work. Under this system, employees prepare “Career Development Sheets” and “Employee Development Plan Reports,” opportunities are provided for interviews with their superiors and, when necessary, the employees are rotated to enable them to gain a broad perspective and learn specialized skills.

Moreover, UBE has introduced an evaluation system that incorporates a goal management system and a performance-based component. By organically linking the above-mentioned development, evaluation, qualification and compensation systems, and impartially evaluating individual efforts, UBE seeks to create a workplace that is challenging and motivating for every employee.

**Environment and Safety Education**

We provide employees with practical education on the environment and safety and encourage all employees to acquire the necessary knowledge, practical skills, and relevant qualifications, such as the public certification required for the operation of equipment in factories.

In addition, we have incorporated mental health education within career education courses (training for new managers, etc.) to ensure that employees receive appropriate training according to their particular circumstances. We have also included the elements of environmental impact assessment in our in-house documents that are circulated for managerial decision making on capital investment and in written proposals submitted for improvement activities to be conducted within the organization, aiming to raise the environmental awareness of all employees.

**Quality Working Environments**

**Relationship with the Labor Union**

Management policies could not be successfully implemented without the employees’ understanding and cooperation with the policies. UBE has been maintaining a favorable labor-management relationship based on a collective labor agreement concluded with its labor union. The two parties exchange opinions frankly and discuss matters at various labor-management meetings attended by top management, which helps management raise employees’ awareness of its policies and plans and helps the labor union have its opinions reflected in the corporate management policies.

**Respect for Human Rights at Workplaces**

In its Action Guidelines for Business Conduct, the UBE Group promises that it will not act against social norms and that it will respect human rights and develop healthy, bright and motivating workplaces. We regard respect for human rights as a fundamental rule guiding the corporate activities of the UBE Group.

We have established the Human Rights Education Promotion Committee, which provides human rights education to employees, including training for directors, site training, and external training courses, as a way to help employees respect and work comfortably with each other by understanding and recognizing the importance of human rights issues.

**Prevention of Sexual Harassment and the Abuse of Power**

As countermeasures against sexual harassment and the abuse of power, we provide all employees with education so that they can respond appropriately if faced with such problems at their own workplaces. In addition, we have consultants on sexual harassment (and abuse of power) and the UBE C-Line notification system in place to help employees solve these problems promptly.

**For Better Work-Life Balance**

**Leave for Volunteer Activities**

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

**Childcare and Nursing Care Leaves**

To maintain a good balance between their work and private life, UBE employees can not only take vacations, but can also take childcare or nursing care leave, work shorter hours or flextime hours, or cap the number of overtime hours, depending upon how much time they have to spend in taking care of their children or other family members.

**Number of Employees Taking Childcare/Nursing Care Leave**

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childcare leave</td>
<td>21</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Nursing care leave</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**Flexible Working Systems**

We have introduced multiple working systems, including a flextime system and a self-managed work system, * to enable employees to work in a flexible and efficient manner. We are also committed to appropriately managing employees’ working hours. For example, we demand that departments with long overtime work hours implement measures to reduce these hours, and we ask employees who have worked overtime beyond a certain limit to meet and receive advice from an industrial doctor.

*Self-managed work system: A work system whereby the necessary procedures for carrying out one’s work and the allocation of work time are independently established through worker self-management in order to achieve work goals.

**Incentives for Taking Annual Paid Vacations**

As an incentive for getting employees to systematically take annual paid vacations, not only do we ask employees to set scheduled vacation dates in advance for every six-month period, but we also take steps to reduce actual working hours by setting an annual paid vacation incentive day at the beginning and end of the year and during the Obon summer holiday.
Supporting the Independent Efforts of Employees to Safeguard Their Health

For employees to live up to their potential at work, it is essential that they look after their physical and mental health. Accordingly, we place a strong emphasis on such health management measures as providing health checkups and health guidance, thereby helping them live a healthy lifestyle.

Developing a Comfortable Workplace and Undertaking Initiatives to Maintain Employee Health

- **Meet and Greet Campaign**
  Since fiscal 2004, the UBE Group has been implementing this campaign to encourage employees to exchange words of greeting and encouragement as a way to promote better communications at their workplaces. By extending this campaign to the UBE Tokyo Head Office and the Kyushu Building Materials Branch in fiscal 2008, the Meet and Greet Campaign is presently being undertaken at 68 operating sites within the UBE Group.

- **Installation of Automated External Defibrillators (AEDs)**
  The UBE Group is moving forward in the installation of AED equipment in the event that an individual goes into cardiac arrest at one of its operating sites. Having already installed 32 AED units Groupwide, UBE is establishing systems to respond to emergency situations that include conducting training sessions on the use of AED equipment and cardio-pulmonary resuscitation.

- **Mental Health Care**
  With 60% of working people nationwide experiencing a high degree of work-related anxiety, worry and stress, the UBE Group conducted mental health training sessions for new employees, mid-level non-managers, new managers and mid-level managers in fiscal 2008. In addition, the Group lends its support to employees who have taken a leave of absence due to mental illness in an effort to help them return to work. This is made possible through the cooperation of industrial doctors and the public institution, Yamaguchi Vocational Center for the Disabled. In fiscal 2009, the Group implemented its Organizational Stress Check in order to survey the mental health and stress level of employees. This initiative has been useful in increasing the mental health of employees.

- **Specified Health Checkups and Health Guidance**
  UBE promotes measures that enlighten employees regarding the improvement of lifestyle habits through such actions as conducting group education, primarily by health nurses and nationally registered dietitians. Since fiscal 2008, efforts to provide instruction to improve lifestyle habits—based on the Ministry of Health, Labour and Welfare’s specified health checkups and specified health guidance measures—have yielded beneficial results for a significant number of employees.

- **Measures to Improve Dietary Habits**
  Dietary habits comprise an essential part of lifestyle habits. We have improved the meals provided at our dormitories and canteens with the help of nationally registered dietitians and are implementing measures to raise the awareness of employees about the importance of good dietary habits. Consequently, we achieved major successes in fiscal 2008 in such areas as initiatives to improve the quality of food served at employee dormitories and canteens in the Tokyo district by providing delicious and healthy menu choices.

- **Blood Donation Activities**
  The total number of individuals who donated blood during the previous one-year period in Ube City was 6,250. Within this, the number of UBE Group employees who cooperated with these efforts totaled 1,105, accounting for 18% of the overall total. UBE Group employees will continue make a contribution to the local community by actively cooperating with health volunteers during blood donation drives.

Staff Message

Supporting Everyone’s Health and Safety

Be healthy and be safe! As an industrial doctor, it is necessary to carry out my duties at the medical office (health management, health guidance and various types of counseling and interviews), while observing employees in the workplace (work management, work environment management, workplace inspections and health education). I do my utmost to support the health and safety of all employees by getting to the root of issues being raised in the workplace. I would like to work together with everyone to create a safe workplace and ensure the health of all employees in order to facilitate active lifestyles throughout everyone’s career and well into retirement.

Naoki Shiota
Chief Industrial Doctor
Health Care & Support Office
Health Care & Support Center
Environment & Safety Department
Promoting Mutual Understanding with Local Communities through Social Contribution Activities

The UBE Group promotes mutual understanding with local communities at its sites in and outside Japan by supporting a variety of social contribution activities.

Support of Culture and Art

The UBE Foundation

The UBE Foundation (Director: Hiroaki Tamura) was established in 1959 as the Watanabe Memorial Science Foundation at the bequest of the late Takaji Watanabe, the founding chairman of UBE. The Watanabe Memorial Science Foundation was renamed the UBE Foundation in 1998 as part of celebrations to mark the 100th anniversary of the Company. The Foundation aims to promote academic research activities and improve research facilities in Japan, thereby assisting academic researchers in their activities and contributing to the future development of academic culture.

Fiscal 2008 marks the 50th anniversary of the foundation’s establishment, and the number of UBE Foundation grant recipients has been increasing every year. Moreover, the UBE Foundation Grand Prize was established as a special award.

In June 2009, the 50th Anniversary Celebration of the UBE Foundation’s establishment was held, as was an UBE Foundation Award Ceremony and a symposium.

UBE Foundation Grand Prize Recipient

<table>
<thead>
<tr>
<th>Name</th>
<th>Position held</th>
<th>Research theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akio Uemura</td>
<td>Professor, Graduate School of Medicine, Yamaguchi University</td>
<td>Creation of new cell loss decomposition reaction using ionic liquid</td>
</tr>
</tbody>
</table>

UBE Foundation Grant Recipients

<table>
<thead>
<tr>
<th>Name</th>
<th>Position held</th>
<th>Research theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitsuhiro Wada</td>
<td>Associate Professor, Graduate School of Biomedical Sciences, Nagasaki University</td>
<td>Development of a new in vivo analytical method for a redox environment based on highly sensitive reactive oxygen species, chemiluminescence measurement and its deployment in food efficiency assessment</td>
</tr>
<tr>
<td>Kazushi Kinbara</td>
<td>Professor, Institute of Multidisciplinary Research for Advanced Materials, Tohoku University</td>
<td>Creation of stimuli-responsive luminescence material using mesostructured silica</td>
</tr>
<tr>
<td>Hideki Amii</td>
<td>Associate Professor, Graduate School of Science, Faculty of Science, Kobe University</td>
<td>Development of a fluorine compound synthetic process adopting a single-bond metathesis reaction</td>
</tr>
<tr>
<td>Motoi Oishi</td>
<td>Lecturer, Graduate School of Pure and Applied Sciences, University of Tsukuba</td>
<td>Creation of a colloidal gold internal capsule-type PEGylated nanogel particle that enables cancer to be pinpointed and treated</td>
</tr>
<tr>
<td>Masato Mikami</td>
<td>Associate Professor, Graduate School of Science and Engineering, Yamaguchi University</td>
<td>Study concerning a complex percolation model accompanied by a reaction</td>
</tr>
<tr>
<td>Yoshihiro Takihara</td>
<td>Professor, Research Institute for Radiation Biology and Medicine, Hiroshima University</td>
<td>The role of HOX in new molecular function and leukemia</td>
</tr>
</tbody>
</table>

Watanabe Memorial Culture Association

Established in 1936 as a private bequest of the late Sukesaku Watanabe, the founder of UBE, the Watanabe Memorial Culture Association (Director, Hiroaki Tamura) was founded to increase the welfare of the citizens of UBE City and to advance the city’s culture, and it therefore supports a variety of lectures, musical concerts and cultural and art-related activities.

In August 2008, UBE co-hosted the first UBE Group Charity Concert performed by the Japan Philharmonic Orchestra, and in September UBE donated $5,000 to both the Watanabe Memorial Book Collection within the Ube City Library and the Watanabe Memorial Culture Association Picture Book Collection.

The Watanabe Memorial Book Collection was donated to the Ube City Library in 2006 and amounts to more than 2,000 books, primarily in the field of art. Moreover, the Picture Book Collection for kindergartens and child-care centers contains more than 1,200 books that can be checked out in sets of 20 books.
With Stakeholders

Relationship with Local Communities

- **Charity Concert Held by the Japan Philharmonic Orchestra**
  Based on the philosophy of “living and prospering together,” advocated by UBE’s founder, Sukesaku Watanabe, Ube Industries held the first UBE Group Charity Concert in August 2008 for the purpose of contributing to the promotion of local culture through music. The concert featured the Japan Philharmonic Orchestra performing in Ube City’s Watanabe Memorial Hall.

  The Watanabe Memorial Culture Association provided Ube City elementary and junior high school students with musical instruction by holding a “hands on concert” with members of the Japan Philharmonic Orchestra. UBE also held “hands on concerts” for patients admitted to Ube Industries Central Hospital with the aim of providing healing through music.

  With the proceeds from these concerts being donated to the local community, five municipal junior high schools in Ube City were given musical instruments, while the Ube City Folk Orchestra and the Ube Music Appreciation Society received monetary donations. UBE will hold its second Annual Charity Concert on October 4, 2009.

- **Bungeishunju “Global Topics”**
  To commemorate the 30th anniversary (and 360 consecutive installments) of UBE being featured in the “Global Topics” corporate advertising section of the monthly magazine, *Bungeishunju*, marked by the publication of the December 2008 issue, a celebration was held by those involved. “Global Topics,” which humorously documents the experiences of UBE Group employees worldwide in the form of a short story, has continued for 30 years owing to the favorable reviews it has received from readers. In light of this, Bungeishunju Ltd. has organized these stories into a book that is currently on sale.

- **Official Sponsor of the 66th National Sports Festival in Yamaguchi and the 11th National Sports Festival for the Disabled in Yamaguchi**
  The UBE Group has become an official sponsor of the 66th National Sports Festival in Yamaguchi and the 11th National Sports Festival for the Disabled in Yamaguchi, which are to be held in Yamaguchi Prefecture in 2011. The UBE Group has pledged its full support to both of these sports events from here onward.

  Furthermore, athletes who have registered for soft tennis, softball, badminton and rugby events at these national sports festivals receive support at both the municipal and prefectural levels. The UBE Group is associated with a number of these athletes and anticipates stellar performances from them.

**Guest Message**

**Making the Lives of Children More Colorful**

The “hands on concert” gave approximately 150 elementary and junior high school students in Ube City the opportunity to appreciate a truly wonderful musical performance as well as the once-in-a-lifetime chance to play music under the direction of premier Japanese musicians. In this way, coming into contact with true art while participating in activities that facilitate musical expression can have a profound impact on the minds of children during a period of their lives when they are very impressionable. Thus, I am certain that this experience will make their lives more colorful. I would like to extend my appreciation to UBE Industries for the contributions they have made over many years to the cultural development of Ube City.

*Shokei Maeda*
Superintendent, Board of Education (at the time)
Ube City Board of Education

---

**First UBE Group Charity Concert**

A French horn being presented to Kawakami Junior High School
With Stakeholders
Relationship with Local Communities

Communication with Local Communities

**UBE Awarded PRTR Grand Prize**

At the fifth Management of Chemical Substances and Risk Communication Awards, hosted by the Center for Environmental Information Science, the UBE Head Office and Ube Chemical Factory received the PRTR Grand Prize in 2008.

The PRTR Grand Prize recognizes companies and business facilities that understand the purpose of the PRTR system, take a leadership role in the administration of chemical substances and actively communicate with citizens to gain their understanding. For this reason, the Center for Environmental Information Science established this awards system with the support of the Ministry of Economy, Trade and Industry, the Ministry of the Environment and other organizations. UBE has been rated highly under this system for its efforts to fully coordinate the administration of chemical substances between the head office and its manufacturing facilities by undertaking risk assessments and establishing an odor monitoring system in the Ube district, while continuing to hold independent dialogue meetings to facilitate in-depth discussions with local residents concerning chemical substances.

---

**7th Responsible Care (RC) Regional Dialogue Meeting Held in the Chiba District**

The Japan Responsible Care Council (JRCC) holds its RC Regional Dialogue meetings mainly in regions where industrial complexes are located. As a member of the Council, UBE participated in the 7th RC Regional Dialogue meeting held at the Chiba Petrochemical Factory in February 2009. Prior to the discussions, a plant tour of the Chiba Petrochemical Factory was held for 80 people representing local neighborhood associations, local governments and university students, all of whom received an explanation of the RC activities undertaken by UBE.

**RC Dialogue Meeting in the Ube-Onoda District**

UBE and five other companies belonging to the Ube-Onoda Branch of the JRCC jointly held the 6th annual RC Dialogue meeting in the Ube-Onoda district in February 2009. During this event, approximately 30 people representing local residents, environmental NPOs, consumer associations, local governments and universities participated, along with businesses.

Following a plant tour and an explanation of each company’s initiatives over the past year, discussions were divided into three tables based on the following topics: Odor, Air and Water Pollution, and Anxiety/Security (Disaster Prevention and Earthquakes). During the subsequent overall discussions, each table explained the contents of their deliberations. The debates that followed gave the dialogues deeper meaning.

---

Orchestra members together with junior high school students playing music during the "hands on concert" held at Kami-Ube Junior High School

“Hands on concert” at Ube Industries Central Hospital
With Stakeholders
Relationship with Local Communities

- **Participation in Local Events**
  UBE Group sites sponsor various local events to promote harmony with local communities. For example, the Ube Chemical Factory held a summer festival named “The Third Chemical Summer Festival” in August 2008, in which as many as 2,000 people participated. In addition, the second Ube Festival was held in the Chiba area, with local government officials and members of local boys’ baseball teams invited. Five hundred employees from local UBE Group companies participated in the festival.

  The Isa Cement Factory participated in Mina City’s Ammonite Festival, and the famous “Dragon Dance” drew wide applause from citizens.

  In order to harmoniously coexist with local communities, each business office participates in this way in a wide range of community activities.

- **Plant Tours**
  The UBE Group factories and research institutes regularly welcome stakeholders to their facilities, including students from local schools and members of various organizations.

  In fiscal 2008, the number of people participating in tours to UBE Group factories in the Ube District reached 6,601, up by 1,342 visitors from the previous year’s level. The factories in the Ube and Chiba Districts also run annual open-house days for the families of employees, and these have proved highly popular among the families.

- **Chemistry Experiment Event for Children**
  Every year, UBE invites schoolchildren to attend chemistry experiment programs during their summer vacation. The purpose of such activities is to help children experience the fascinating world of chemistry by providing them with easy-to-understand explanations of the Group’s advanced technologies.

  In 2008, the 20th Summer Holiday Junior Science Class was held at the UBE Head Office, where Ube Information Systems, Inc. conducted fun experiments in a project that had the children create key holders and t-shirts using personal computers. In Tokyo, the Organic Specialty Materials Research Laboratory and the Electronic Components & Materials Business Unit held the Dream/Chemistry-21 Children’s Summer Holiday Chemistry Experiment Show in Tokyo, where children enjoyed creating their own original bookmarks using high-performance plastics.

  In addition, at the “Interesting and Exciting Chemistry World Exhibition 2008 in Yamaguchi,” held at Onoda Sun Park (Sanyo Onoda City), the Organic Chemistry Research Laboratory demonstrated “flow visualization,” in which those in attendance were able to see the complex flow of liquid.

- **Internships (Training at Factories)**
  As part of its CSR and recruitment activities, UBE annually accepts some graduate students from universities and students from specialized vocational high schools under its internship program.

  In August 2008, we accepted 21 students as trainees from 14 specialized vocational high schools throughout Japan—from Tohoku to Kyushu. They were divided into three groups, and the groups received training at one of the following three sites for five days: the Ube Chemical Factory, the Ube Cement Factory, and a power generation facility. We also accepted five university students for training programs lasting from two weeks to three months at production facilities and laboratories.

  Furthermore, each year we offer internships (four internships were completed in fiscal 2008) at the Organic Chemistry Research Laboratory through a comprehensive partnership with Yamaguchi University.
Education for Junior High School Students: Special Classes on the Preciousness of Life

Maternity nurses from Central Hospital conducted special classes at nearby Junior High Schools on the “preciousness of life.” At the beginning of the class, students were introduced to the sound of a baby’s heartbeat in the womb (Doppler sound) and viewed a childbirth on video, witnessing the preciousness of life. In the second half of the class, under the title, “A junior high school student’s body is in the process of becoming an adult’s,” the subjects of sexually transmitted disease and prevention are explained. Students learned more about the preciousness of life through a model of a baby in the womb and the two maternity nurse instructors later received written reports from 150 students.

Voluntary Tree- and Flower-Planting Activities

In November 2008, 110 employees of the UBE Group participated in the First Forest Creation Experiential Activity for Water Conservation (Sponsor: Yamaguchi Prefecture Mine Agriculture and Forestry Office) by pruning, thinning and planting Japanese cypress trees. Through these efforts we established a forest at the headwaters of Lake Ono in order to maintain a nearby industrial water supply and a stable supply of drinking water.

Moreover, employees voluntarily plant flowers within the premises of UBE Group sites as a beautification measure. Of special note, the Ube Chemical Factory competed in flowerbed contests held by Ube City, winning a prize in the model category in 2007 and receiving the Grand Prize in 2008.

Tours of Local Industrial Facilities

Again in 2008, the UBE Group participated in tours of local industrial facilities. These tours have been conducted by a local council established to promote industrial tourism in the region. In the project, corporate contributors to the development of local communities and protection of the environment are introduced to participants. Entitled, “Three Cities, Three Influential Men and 24 Stories,” the tour takes people to places closely connected to the three men, including Sukesaku Watanabe, the founder of UBE, who were instrumental in the development of the cities of Ube, Mine and Sanyoonoda, starting with visits to UBE-i-Plaza, the Isa Cement Factory and the Coal Center. These tours have been favorably received.

Guest Message

Eminent “CSR Tour” Begun in May

In November 2007, the UBE-i-Plaza was established to commemorate the 110th anniversary of UBE. In addition, a tour of industrial facilities that visits the cities of Ube, Mine and Sanyoonoda and cultural assets started off under the title “CSR Tourism.” Also in 2008, bus tours began in July, and they have taken 473 people from all over Japan along 24 different courses.

In 2009, we offered “CSR Tours” from May along 20 different courses. We look forward to everyone’s participation. Incidentally, I am one of the tour leaders who acts as a tour guide.

Teruhiro Watanabe
Director, Ube Industries Retired Persons Committee
Activities in Thailand

The three companies comprising the Thai UBE Group (Thai Caprolactam Public Co., Ltd., UBE Nylon (Thailand), Ltd., and Thai Synthetic Rubbers Co., Ltd.) are promoting communication with local residents through multiple activities, based on the idea that the UBE Group is a part of the community.

Organization of the One-Day Summer Program

The One-Day Summer Program that we hold for local children—which has become an established custom—marked its 10th anniversary in fiscal 2008. Employees of the Thai UBE Group and local university students participate as instructors in the camp.

Chemical Engineer Training Project

As a founding member, the Thai UBE Group began making monetary donations to Mabtaput Technical College’s chemical engineer training project, which was launched March 2008. In addition, the Group accepts students for on-the-job training programs held at its manufacturing facilities so they can learn the skills required to work in petrochemical factories in the future.

Volunteer Activities that Revitalize Local Communities

Promoting local community-based activities known as “Better Quality of Living,” we lent our support to the donation of garbage cans to various local towns as well as to mosquito control programs and mobile public health clinics, both of which are managed by Thailand’s Ministry of Public Health. These mobile public health clinics visit areas near Group manufacturing facilities once a month to provide health examinations. We also provide assistance to the Thai Government’s Antinarcotics Program and the Accident Victim Relief Club.

Sports Promotion

The UBE Community Park was opened near the Thai UBE Group’s manufacturing facility located in Rayong Province in July 2008. Beyond being a place where people can enjoy sports, the UBE Community Park accommodates a wide array of uses, including various activities geared toward the local community.

UBE Charity Golf Tournament

The Thai UBE Group holds charity golf tournaments to provide support to the “I Love Reading” program for children, with monetary donations going to the purchase of reading materials for five local schools.
Activities in Spain

The three UBE Group companies in Spain (Controlling Company: Ube Corporation Europe, S.A.) comply with the global Responsible Care (RC) initiative, take steps to improve communication with local communities and actively promote social contribution activities. A wide range of activities were carried out in 2008.

- **Sponsorship of Facility Tours**
  UBE sponsors numerous factory tours for nearby schools, PTA representatives, teachers, government officials, legislative members and others, and 130 other people have participated in these tours thus far. We have established innovative and well-received programs that enable the acquisition of knowledge and experience outside of business activities by providing opportunities during factory tours for high school students to participate in simulated experiments to experience the actual functioning of water drainage treatment equipment and by inviting local academic experts to give talks on municipal waste treatment systems to PTA representatives and teachers.

- **Exchanges with High Schools and Universities**
  In May 2008, UBE supported the 21st National Chemical Olympics for high school students, which was held in Castellon. We also supported brief special courses for science teachers and special courses covering plastic materials that included a tour of the Engineering Plastics R&D Center.
  In addition, we have deepened exchanges with Jaume I, a local university that has graduated many of the people who now staff the UBE Group in Spain, by accepting about 10 students every year as interns in such divisions as accounting, manufacturing, technology and R&D with our staff serving as teachers and instructors.

  We continue to support Castellon’s Business University Fund and master’s program for energy conservation and the sustainability of industrial facilities and equipment.

- **Support for Sports Activities**
  We continue to actively support a range of local sports teams and clubs, including the Playas de Castellon volleyball team, the L’illa-Grau volleyball team, a fishing contest sponsored by a sailing club and the Castellon 10km marathon.

  In October 2008, we sponsored the national Special Olympics for the mentally handicapped, which was held in Castellon.

---

**Guest Message**

The Thai UBE Group is close to our community.

Prior to becoming the village head I had seen UBE’s ongoing CSR activities. They are closely related to the community and include such activities as supplying water for daily life and installing toilets in schools and temples. They demonstrate a strong desire on UBE’s part to build good relations with the community. As the community’s sports club leader, I really think it is wonderful that UBE established the UBE Community Park.

And I must add that even if an unanticipated situation arises or a mistake is made, UBE swiftly resolves it. UBE always maintains close relations with our community.

Tanbon Tabon Mu IV, Village Head (Thailand)  
Kunin Ranson
Initiatives for Environment and Safety

At the UBE Group, conserving the environment and protecting health and safety come first in its business operations. This is necessary in order to provide products and services that make people’s lives better and to achieve solid and sustainable growth.

UBE Group
Environmental and Safety Principles

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

The UBE Group 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 implementation of dialogue with society.

Operational Safety
Ensuring operational safety shall be the priority in all areas and activities under UBE’s commitment to respect human life.

Process Safety
Maintenance of process safety shall be part of its basic mission as a manufacturer.

Environmental Preservation
As a responsible corporate citizen, the UBE Group shall act positively to protect and improve both community and regional conditions and work for the preservation of the global environment.

Product Safety
The UBE Group shall pursue its corporate responsibility in providing its customers and the public with safe and reliable products.

Health Management
The UBE Group recognizes that maintaining and promoting the health of its employees is the basis of corporate and social vitality.

Revised in July 2009

Hiroaki Tamura
President and Group CEO, Representative Director
The UBE Group actively promotes projects that enable reductions in CO₂ emissions and the creation of a recycling-based society in all of its wide-ranging business fields, while contributing to a low-carbon society through its technologies and products.

With its origins in the coal industry, UBE is consistently concerned about issues related to energy and the environment. For this reason, the Company has produced new technologies and products that contribute to a wide array of global environmental preservation efforts, including energy conservation processes, gas separation membranes and the processing of waste materials at cement factories. UBE has also undertaken development activities with an eye on the future by producing technologies in such areas as the gasification of waste plastic—for which the Company has been undertaking pioneering initiatives worldwide—and biomass power generation.

UBE established the Global Warming Countermeasures Promotion Office as an organization dedicated to investigating and promoting measures to conserve energy and reduce CO₂ emissions in the mid- to long-term in order to further bolster company initiatives to prevent global warming. In terms of its various products, UBE will take steps to reduce environmental impact throughout product life cycles and make greater efforts to improve material and technological development, while contributing to a low-carbon society through its technologies and products.

Yasuhisa Chiba
Vice-President and Group CTO,
Representative Director
Protecting the Environment and Promoting Health and Safety for Employees and Local Communities through Top-Down Management

The UBE Group has been carrying out responsible care (RC)**1 activities across all of its business fields, from the Chemical segment, the Cement & Construction Materials segment, and the Machinery & Metal Products segment to the Energy and Environment segment.

**Environment and Safety Promotion System**

The UBE Group has established the Group Environment and Safety Committee and the Group Product Liability and Quality Committee as the top decision-making organizational units for the promotion of "Environmental and Safety Principles." These committees—which consist of the members of the Group Strategic Management Committee and are chaired by the CEO—determine and review the Group-level policies and measures relating to the environment, occupational safety, health, and product safety.

Each of these two decision-making units has five subordinate committees of the same name for segments involved in promoting measures for the environment, occupational safety, and product safety in their business segments, according to the policies and measures determined by the Group committees. Besides such segment subcommittees, the Group Environment and Safety Committee has individual subcommittees with responsibility for five specific areas, and they discuss and review concrete action plans and prepare various related reports.

**Responsible Care Management System**

Using the Plan-Do-Check-Action (PDCA) management cycle, we are promoting continuous improvements.

The UBE Group’s fiscal environment, health and safety measures, which the Group Environment and Safety Committee deliberates and decides on, are thoroughly publicized in every office and facility through each division’s Environment and Safety Committee. Each office and facility prepares its annual management plan based on these measures and performs the PDCA cycle in its office or facility. The status of the plan’s implementation is checked through an environment and safety audit and inspection organized by the Environmental and Safety Department at Headquarters, and the results are then reflected in the next fiscal year’s measures.

**Glossary**

*1 RC (Responsible Care): Under RC, corporations that manufacture and/or handle chemical substances work voluntarily to preserve "health, safety and the environment" throughout product life cycles, from the development of chemicals through their manufacture, distribution, use and final consumption to disposal. These commitments must be clearly reflected in the corporations’ management policies. Activities are carried out in the areas of environmental protection, disaster prevention, occupational safety and health, chemicals and product safety and logistics safety, and their results are announced and a social dialogue ensues.
The UBE Group is actively implementing measures to acquire ISO 14001, 9000-series, and OHSMS certification, which are the respective international standards for the environmental management system (EMS), quality management system (QMS), and occupational health and safety management system (OHSMS). All the operating sites of UBE have already acquired certification for these three management systems.

In addition, we have received certification for the inspection of high-pressure gas equipment and boilers, so we have been independently checking their safety on an ongoing basis.

**High-Pressure Gas Equipment Inspector Certification**

**(for Safety/Post-Completion Inspections)**

<table>
<thead>
<tr>
<th>Type of Certification</th>
<th>Certified Factories</th>
<th>Year of Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Pressure Gas Equipment Inspector Certification (for Safety/Post-Completion Inspections) (High-Pressure Gas Safety Law)</td>
<td>UBE Industries, Ltd. (Chiba Petrochemical Factory)</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>UBE Industries, Ltd. (Sakai Factory)</td>
<td>1999</td>
</tr>
<tr>
<td>Certification as boiler and Class-1 pressure vessel inspector (for inspections to be conducted while boilers and pressure vessels are in operation) (Industrial Safety and Health Act)</td>
<td>UBE Industries, Ltd. (Chiba Petrochemical Factory)</td>
<td>1997</td>
</tr>
<tr>
<td></td>
<td>Sakai Factory</td>
<td>1998</td>
</tr>
</tbody>
</table>

**Notes:**
1. High-pressure gas post-completion inspectors are certified by the Minister of Economy, Trade and Industry to conduct inspections on high-pressure gas equipment following the completion of modification work (post-completion inspections), which are conducted under the auspices of prefectural governors.
2. High-pressure gas safety inspectors are those who are certified by the Minister of Economy, Trade and Industry to conduct safety inspections on high-pressure gas equipment, which are conducted under the auspices of prefectural governors.
3. Inspectors of boilers and Class-1 pressure vessels are certified by the heads of local labor standards supervision offices to conduct performance inspections without suspending the operation of the boilers and vessels.

---

**Certification Acquired and the Year Awarded**

<table>
<thead>
<tr>
<th>Name of Company</th>
<th>EMS</th>
<th>QMS</th>
<th>OSHMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sakai Factory, Ube Industries, Ltd.</td>
<td>2000</td>
<td>1996</td>
<td>2005</td>
</tr>
<tr>
<td>Ube Chemical Factory, Ube Industries, Ltd.</td>
<td>2000</td>
<td>1994</td>
<td>2006</td>
</tr>
<tr>
<td>Ube Cement Factory, Ube Industries, Ltd.</td>
<td>1999</td>
<td>1997</td>
<td>2005</td>
</tr>
<tr>
<td>Kanda Cement Factory, Ube Industries, Ltd.</td>
<td>1999</td>
<td>1996</td>
<td>2005</td>
</tr>
<tr>
<td>Is a Cement Factory, Ube Industries, Ltd.</td>
<td>1999</td>
<td>1995</td>
<td>2005</td>
</tr>
<tr>
<td>Organic Chemistry Research Laboratory, Ube Industries, Ltd.</td>
<td>1999</td>
<td></td>
<td>2007</td>
</tr>
<tr>
<td>Organic Specialty Materials Research Laboratory, Ube Industries, Ltd.</td>
<td>1999</td>
<td></td>
<td>2007</td>
</tr>
<tr>
<td>Okinoyama Coal Center, Ube Industries, Ltd.</td>
<td>2000</td>
<td></td>
<td>2007</td>
</tr>
<tr>
<td>Power generation facilities of Ube Industries, Ltd.</td>
<td>2000</td>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>Ube Aluminum Wheel Factory, Ube Industries, Ltd.</td>
<td>2000</td>
<td>1998</td>
<td>2005</td>
</tr>
<tr>
<td>Ube Ammonia Industry, Ltd.</td>
<td>2001</td>
<td>2002</td>
<td>2004</td>
</tr>
<tr>
<td>Ube Maintenance Co., Ltd.</td>
<td>2000</td>
<td>2005</td>
<td>2006</td>
</tr>
<tr>
<td>Ube Electronics, Ltd.</td>
<td>2005</td>
<td>2000</td>
<td>2008</td>
</tr>
<tr>
<td>Thai Caprolactam Public Co., Ltd. (Thailand)</td>
<td>2002</td>
<td>2002</td>
<td>2002</td>
</tr>
<tr>
<td>Thai Synthetic Rubbers Co., Ltd. (Thailand)</td>
<td>2000</td>
<td>2002</td>
<td>2002</td>
</tr>
<tr>
<td>Ube Nylon (Thailand), Ltd. (Thailand)</td>
<td>2004</td>
<td>2003</td>
<td>2006</td>
</tr>
<tr>
<td>Ube Film, Ltd.</td>
<td>2004</td>
<td>2006</td>
<td>*</td>
</tr>
<tr>
<td>Ube Chemical Europe, S.A. (Spain)</td>
<td>2009</td>
<td>1999</td>
<td>*</td>
</tr>
<tr>
<td>Ube Engineering Plastics, S.A. (Spain)</td>
<td>2009</td>
<td>2005</td>
<td>*</td>
</tr>
<tr>
<td>Ems-Ube, Ltd.</td>
<td>2000</td>
<td>1994</td>
<td>2006</td>
</tr>
<tr>
<td>Ube-Netto Kasei Co., Ltd.</td>
<td>2001</td>
<td>1997</td>
<td>2006</td>
</tr>
<tr>
<td>Ube Board Co., Ltd.</td>
<td>2006</td>
<td>2003</td>
<td>2008</td>
</tr>
<tr>
<td>Hagimori Industries, Ltd.</td>
<td>2004</td>
<td>2002</td>
<td>2005</td>
</tr>
<tr>
<td>Ube Shipping &amp; Logistics, Ltd.</td>
<td>2000</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>Yamaha Metal Co., Ltd.</td>
<td>*</td>
<td>2000</td>
<td>2006</td>
</tr>
<tr>
<td>UBE Scientific Analysis Laboratory, Inc.</td>
<td>1999</td>
<td>2001</td>
<td>2007</td>
</tr>
<tr>
<td>Ube Steel Co., Ltd.</td>
<td>2005</td>
<td>1999</td>
<td>2007</td>
</tr>
<tr>
<td>Fukushima, Ltd.</td>
<td>1998</td>
<td>1997</td>
<td>2000</td>
</tr>
<tr>
<td>Ube Machinery Corporation, Ltd.</td>
<td>1999</td>
<td>1996</td>
<td>2005</td>
</tr>
</tbody>
</table>

**Notes:**
1. An asterisk mark (*) indicates sites currently examining the acquisition of certification. A slash mark (/) indicates that the site does not have any systems for which the certification is applicable.
2. For Group companies that have several factories, the earliest year in which any of the factories acquired the certification is shown.

---

*The RC Global Charter calls on every company to strengthen their global responsible care activities in cooperation with their country’s Chemical Industry Association, and in August 2008, UBE’s CEO signed the Sustainability Declaration.*
**Initiatives for Environment and Safety**

**Environmental Management**

The UBE Group establishes targets and plans each year to promote RC activities in line with its Responsible Care Code.

At the end of each fiscal year, the Group conducts a self-evaluation, the results of which are reflected in RC activities in the subsequent fiscal year. In this manner, the Group makes continuous efforts to improve its RC activities.

The UBE Group is steadily attaining its environmental objectives, which were set as the targets in its mid-term management plan, “Stage Up 2009.” Individual targets, plans, measures and activity reports for fiscal 2008 are listed below.

### Outline of RC Activities

**UBE Group Medium-Term RC Targets (Fiscal 2007–2009)**

<table>
<thead>
<tr>
<th>Responsible Care Code</th>
<th>Targets for Fiscal 2008</th>
<th>Planning and Policy in Fiscal 2008</th>
</tr>
</thead>
</table>
| Management Systems    | 1. Promote compliance activities  
  2. Improve high-pressure gas safety promotion systems  
  3. Develop and revise rules and standards  
  4. Promote green purchasing  
  5. Continue/implement environment and safety audits in Japan and overseas  
  6. Implement quality and product safety audits | |
| Environmental Preservation | 1. Promote global warming prevention measures  
  2. Further improve environmental performance  
  3. Reduce environmental complaints | |
| Process Safety and Disaster Prevention | 1. Ensure the operation of a PDCA cycle in maintenance management  
  2. Improve group-wide earthquake preparedness and response | |
| Occupational Safety and Health | 1. Develop comfortable working environments  
  2. Upgrade employee wellness programs  
  3. Reduce industrial accidents  
  4. Improve safety activities based on OSHMS®  
  5. Carry out collective safety management activities with partner companies  
  6. Enhance communication in the workplace  
  7. Promote safety management measures for elderly employees | |
| Distribution Safety | 1. Measures to prevent distribution-related complaints and improve distribution quality  
  2. Revise GHS MSDS® and labels systematically  
  3. Continue measures to deal with toxic substances contained in products (RoHS® Directives, green procurement) | |
| Chemicals and Product Safety | 1. Implement preparatory measures to comply with the EU’s REACH®  
  2. Revise GHS MSDS® and labels systematically  
  3. Continue measures to deal with toxic substances contained in products (RoHS® Directives, green procurement) | |
| Dialogue with Communities | 1. Continue implementation of RC dialogue  
  2. Fulfill CSR Report (increase reliability)  
  3. Conduct dialogues with employees to ensure their deeper understanding of CSR reports | |
Initiatives for Environment and Safety

Environmental Management

Achieved  Largely achieved  Yet to be achieved

<table>
<thead>
<tr>
<th>Fiscal 2008 Activity Report</th>
<th>Evaluation</th>
<th>Pages Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Promoted compliance through environment and safety audits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Implemented audits at Chiba Petrochemical Factory and Sakai Factory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Revised/formulated relevant internal rules to address regulatory changes, as necessary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Increased the UBE Group’s green purchasing rate to 63%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Implemented environment and safety audits at 10 facilities/departments, four Group companies in Japan and two overseas departments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Implemented quality/product safety audits at five facilities/departments and seven Group companies in Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-1. UBE Group CO₂ emissions volume: Reduced by 16% (compared with the 1990 level); attained mid-term target of 12% in advance</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>1-2. Created a data administration system for the amount of energy used and greenhouse gas (GHG) emissions produced by the UBE Group</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>1-3. Participated in the trial implementation of an integrated market for emissions trading in Japan</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>2-1. Emissions of 12 voluntarily selected chemical substances: reduced by 64% (compared with the 2000 level); attained mid-term target of 60% in advance</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>2-2. Final waste disposal by external sectors: reduced by 81% (compared with the 2000 level); attained mid-term target of 60% in advance</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>3. Responded to odor- and noise-related reports made by governmental agencies, corporate and civic neighbors and employees</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>1. Reviewed the state of full facility inspections during environment and safety audits. One accident involving the distribution of heavy oil and three fire-related accidents occurred.</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>2-1. Implemented BCP*6 earthquake response drills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-2. Organized an earthquake response manual for Group companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3. Introduced earthquake warning system (Sakai Factory)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Activities performed with regard to the Meet and Greet Campaign, segregation of smoking areas and encouragement of no smoking, use of health checkup results, mental health management programs, and programs to improve dietary behavior</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>2. Installed automated external defibrillators (AEDs) and conducted training sessions on their use</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>1. New certification acquired by one Group company; enhanced risk assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Implemented safety audit of affiliate companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Held KPI<em>7 seminars and safety dialogue meetings with external lecturers (development of STOP</em>8 activities)</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>4. Developed guidelines on measures for elderly workers and implemented thorough measures to prevent forklift accidents and industrial accidents</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>1. Completed pre-registration in Japan, Europe and Thailand; registration process is underway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Updated and created new MSDSs; promoted the full introduction of container yellow cards (labeling system)</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>3. Properly implementing responses to RoHS Directives and green procurement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-1. Held the 6th Ube/Onoda Community RC Dialogue Meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2. Participated in the RC Regional Dialogue conferences in the Chiba District</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3. Awarded the 5th PRTR Grand Prize 2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Received third-party verification of CSR Report 2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-1. Organized internal meetings to explain CSR Report (Chiba, Tokyo, Sakai and Ube)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-2. Distributed the CSR Report 2008 to all employees in every Group company</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Glossary

*1 GHS: Globally Harmonized System of Classification and Labeling of Chemicals that are used in MSDS and container labels
*2 OSHMS: Occupational Safety & Health Management System
*3 REACH regulation: Regulation on chemical substances enforced in the EU in June 2007 (REACH stands for Registration, Evaluation, Authorisation and Registration of Chemicals)
*4 MSDS: Material Safety Data Sheet (documentation containing the product name, physiochemical properties, uses, and hazard and toxicity information)
*5 EU RoHS Directive: Restricts the use of certain hazardous substances in electrical and electronic equipment
*6 BCP: Business continuity plan, which is made to minimize the suspension of business in the event of a disaster and to recover its functions as early as possible to ensure business continuity
*7 KPI: Key Performance Indicator
*8 STOP (Safety Training Observation Program): DuPont’s safety administration activity program
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 Group business activities and promoting more efficient sustained environmental preservation.

The results for fiscal 2008 are as shown in the following tables.

Environmental Preservation Costs

Capital investment increased by ¥1,170 million compared with the fiscal 2007 level, to ¥3,430 million. The main reason behind the increase was capital investment in industrial waste recycling and other areas.

Costs increased by ¥820 million over fiscal 2007, to ¥10,740 million, chiefly due to an increase in costs associated with the operation of industrial waste recycling equipment for which investments were made in fiscal 2007 and 2008, as well as an increase in equipment repair costs.

Economic Effect

The income effect amounted to ¥630 million. This figure includes proceeds from the sale of marketable waste.

The saving effect was ¥1,400 million less than in fiscal 2007, totaling ¥6,830 million. Contributing factors included a decreased intake in the amount of raw materials in fuel recycling.

UBE Group’s Environmental Measures Costs

<table>
<thead>
<tr>
<th>Category</th>
<th>Main Activity</th>
<th>Capital Investment</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution prevention</td>
<td>Costs of investing in and maintaining air and water pollution prevention facility</td>
<td>10.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Global environment preservation</td>
<td>Costs of investing in and maintaining energy-saving facility</td>
<td>3.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Resource recycling</td>
<td>Costs of recycling and reducing industrial waste</td>
<td>8.4</td>
<td>15.3</td>
</tr>
<tr>
<td>Upstream/downstream costs</td>
<td>Costs of container/packaging recycling, green purchasing</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Costs of management activities</td>
<td>Costs of acquiring, running and maintaining environmental management systems</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Research and development costs</td>
<td>R&amp;D costs of environment-friendly products and technologies</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Costs of social activities</td>
<td>Costs of greening and beautifying offices/facilities and their surroundings</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Costs of cleaning up environment damage</td>
<td>Payment of environment-related levy</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22.6</td>
<td>34.3</td>
</tr>
</tbody>
</table>

Economic Effect

*Sales by resource recycling businesses (revenues from the acceptance of industrial waste as fuel and raw materials for cement production), which were integrated in the business line in fiscal 2005, are excluded. Figures in parentheses represent the total if these are included.

UBE Group Environmental Accounting Method

Companies covered: UBE Group companies (Except for UBE-MC Hydrogen Peroxide, Ltd., only consolidated subsidiaries from “Companies covered” on page 9).

Calculations are based on Environmental Accounting Guidelines (Ministry of the Environment FY 2005 version).

The economic effect is the effect obtained in fiscal 2008 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 set off and eliminated.
Environmental Performance

The UBE Group recognizes that environmentally oriented business practices are vital for its ongoing growth. We will continue to promote measures to prevent global warming, reduce emissions of toxic chemical substances and industrial waste, and use waste and resources effectively in order to continuously foster business activities that contribute to the formation of a recycling-based society.

Overview of UBE Group Environmental Impact in Fiscal 2008

Input

- Total energy: As crude oil, 2,530,000 kL
- Total raw materials: 17,678,000 t
- Water resources: Water used (excluding seawater)**: 101,200,000 m³
- Capital investment for environmental measures: ¥3,430,000,000

UBE Group Business Activities

Production

Airborne emissions
- CO2*: 11,400,000,000 t-CO2
- Non- CO2 greenhouse gases**: 150,000 t-CO2
- SOx: 2,790 t
- NOx: 17,292 t
- Dust: 517 t
- PRTR substances*: 1,066 t

Soil emissions
- PRTR substances**: 0 t

Output

- Waterborne emissions
- Wastewater**: 195,100,000 m³
- COD: 948 t
- Total nitrogen: 7,961 t
- Total phosphorus: 396 t
- PRTR substances*: 201 t

- Industrial waste emissions
- Off-site disposal volume: 6,123 t
- Recycled volume: 385,634 t

- Environmental preservation economic effect
- Income effect (excluding tax): ¥630,000,000
- Saving effect: ¥6,830,000,000

Fiscal 2007 and 2008 Environmental Data by Factory

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As crude oil</td>
<td>1,429</td>
<td>1,650</td>
<td>3,228</td>
<td>3,646</td>
<td>1,429</td>
<td>1,650</td>
<td>3,228</td>
<td>3,646</td>
<td>537</td>
<td>597</td>
<td>146</td>
<td>200</td>
</tr>
<tr>
<td>Total raw materials</td>
<td>17,678,000 t</td>
<td>17,678,000 t</td>
<td>17,678,000 t</td>
<td>17,678,000 t</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water used (excluding seawater)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See "Companies covered" on page 9 for details on the scope of UBE Group performance data.

*1 The difference between the "water used" and "wastewater" is because wastewater includes seawater.
*2 Indicates total CO2 emissions (excluding raw combustible material waste).
*3 CH4, N2O, HFC, PFC, and SF6.
*4 PRTR figures are based on 480 substances designated by the Japan Chemical Industry Association (JCIA) (See page 52 for reference).
The UBE Group is contributing to the creation of a low-carbon society by reducing CO₂ through its products and technologies, as well as through its efforts to conserve energy and the effective use of waste materials.

In fiscal 2008, the UBE Group reduced its CO₂ emissions by 12% from the fiscal 1990 level and will make further efforts to achieve even greater reductions in the years ahead.

### Medium-Term Management Plan**1** (UBE Group Comprehensive Targets)

1. CO₂ emissions reduction target to be achieved by the introduction of energy-saving measures, fuel conversion and waste utilization policies in fiscal 2010 set at 12% (compared with the fiscal 1990 level)
2. Reduction of emissions of greenhouse gases other than CO₂ of 100,000 tons (CO₂ equivalent) annually by fiscal 2010
3. The above two targets are to be achieved in fiscal 2009, which is earlier than scheduled.

### Targets Stipulated in Voluntary Action Plans of Industrial Fields

- **Target for Japan Chemical Industry Association**
  - 20% reduction in Unit Energy Consumption (1990 basis, 2008-2012 Target)
- **Target for Japan Cement Association**
  - 3.8% reduction in Unit Energy Consumption (1990 basis, 2008-2012 Target)
- **Target for Lime Manufacture Association**
  - 8% reduction in the volume of energy used and energy-based CO₂ emissions (1990 basis, 2008-2012 Target)
- **Target for Japan Industrial Machine Association**
  - 12.2% reduction in CO₂ emissions during manufacturing processes (1997 basis, 2008-2012 Target)

The UBE Group continues to actively work as a whole to conserve energy and reduce CO₂ emissions in order to achieve voluntary action plan targets of each industrial field.

### CO₂ Emissions and CO₂ Emission Intensity Index

<table>
<thead>
<tr>
<th>FY</th>
<th>1990</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Net targets: 88% (fiscal 1990 basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1,000</td>
<td>1,020</td>
<td>0.85</td>
<td>0.84</td>
<td>0.78</td>
<td>0.77</td>
<td>0.87</td>
</tr>
<tr>
<td>1,200</td>
<td>1,240</td>
<td>1,240</td>
<td>1,210</td>
<td>1,210</td>
<td>1,210</td>
<td>1,160</td>
<td></td>
</tr>
<tr>
<td>1,400</td>
<td>1,370</td>
<td>1,370</td>
<td>1,370</td>
<td>1,370</td>
<td>1,370</td>
<td>1,370</td>
<td></td>
</tr>
</tbody>
</table>

Values related to the volume of energy consumption and CO₂ emissions were revised retroactively to fiscal 1990 levels in accordance with the Law Regarding the Rationalization of Energy Use and the Law Concerning the Promotion of the Measures to Cope with Global Warming. In fiscal 2008, UBE EUP Business Unit’s Ube Factory and Organic Chemistry Research Laboratory, Central Hospital, UBE-MC Hydrogen Peroxide, Ltd. and Fukushima, Ltd. were designated energy management factories under the Law Regarding the Rationalization of Energy Use.

### Energy Consumption and Energy Consumption Intensity Index

<table>
<thead>
<tr>
<th>FY</th>
<th>1990</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Net targets: 88% (fiscal 1990 basis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1,000</td>
<td>1,010</td>
<td>1,010</td>
<td>0.96</td>
<td>0.96</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>1,000</td>
<td>1,020</td>
<td>1,020</td>
<td>1,020</td>
<td>1,020</td>
<td>1,020</td>
<td>1,020</td>
<td></td>
</tr>
<tr>
<td>1,000</td>
<td>1,040</td>
<td>1,040</td>
<td>1,040</td>
<td>1,040</td>
<td>1,040</td>
<td>1,040</td>
<td></td>
</tr>
</tbody>
</table>

### Glossary

1. **Medium-term management plan**: Formulated in April 2007, this plan is set for the three-year period from fiscal 2007 to fiscal 2009.
2. **GHG (greenhouse gas)**: CO₂, CH₄, N₂O, HFC, PFC and SF₆ are six greenhouse gases specified in the Kyoto Protocol.
3. **Wood biomass**: An energy source derived from organic materials that include thinned wood, lumber, branch and leaf clippings and construction waste materials. It is a renewable energy that is categorized as a new energy.
4. **Modal shift**: A shift from truck transport to rail and domestic shipping-based transport that uses less energy per amount transported.
Introduction of GHG Control System
As a result of revisions to the Act on the Rational Use of Energy and the Act on Promotion Measures to Cope with Global Warming, performance reporting for energy consumption, CO2 emissions and other areas for fiscal 2009 shall no longer be reported to the government by each factory, but by corporate headquarters instead. In preparation for this change, UBE has constructed its own GHG control system for the purpose of simplifying the aggregation of data from each factory and centralizing the data, including that related to energy consumption and CO2 emissions, which are the basis for future measures for energy conservation and global warming prevention.

Establishment of Dedicated Organization to Prevent Global Warming
To further strengthen the UBE Group’s efforts to prevent global warming, the Global Warming Countermeasures Promotion Office was established in July 2009 as an organization for the medium- to long-term study and promotion of energy conservation and CO2 reduction measures.

Efforts in the Factory
In 2008, we used wood biomass as a boiler fuel at the Isa Cement factory and the 216 MW thermal power facility, and this contributed to the reduction of CO2 emissions by about 130,000 tons annually. From fiscal 2009, we anticipate a nearly 200,000 ton reduction in CO2 emissions by lowering the amount of fossil fuel and electric power consumed through process improvements, greater machinery and equipment efficiency and the use of alternative fuels derived from waste plastic and other types of waste. Moreover, in February 2009, the Sakai Factory received the Osaka Stop Global Warming Award from the Osaka government in recognition of its significant reduction of greenhouse gases in fiscal 2007, and it also received the Kinki Bureau of Economy, Trade and Industry Award as an Excellent Energy Conservation Factory and was commended for its longstanding energy conservation activities.

Efforts in Logistics
In the Logistics Re-engineering Project, which seeks to improve the efficiency of sales and logistics, the aluminum wheel division was able to improve the energy efficiency of logistics by almost 50% (crude oil: approx. 40kl/annual reduction) by switching the freight that it transports from Yamaguchi Prefecture to Tochigi Prefecture from the current 10-ton trucks to ferry transport. This improvement received Fiscal 2008 Kitakyushu City Modal Shift Promotion Auxiliary System Business certification by Kitakyushu City. UBE plans to expand the scope of the modal shift in the aluminum wheel division. In addition, UBE will pursue cooperative transportation amongst the Group and the optimal placement of shipping bases while promoting both the reduction of environmental impact and cost.

GHG emissions for UBE Group/by company (fiscal 2008 results)

GHG emissions for UBE Group/by type of gas (fiscal 2008 results)

Fiscal 2008 GHG emissions: Virtually all of the UBE Group’s GHG emissions, when looked at by company, come from UBE, Ube Ammonia Industry, Ltd. and Ube Material Industries, Ltd. By type of gas, energy- and non-energy-based CO2 emissions (process-derived) comprised more than 90% of all CO2 emissions. Both energy- and non-energy based CO2 emissions were of nearly equal proportions.
Implementing Appropriate Chemical Management and Voluntary Emission Reduction of Toxic Chemical Substances

The UBE Group continues to undertake measures to reduce emissions of harmful air pollutants, PRTR\(^{1}\) materials and voluntarily selected toxic substances that include VOCs.\(^{2}\)

### Initiatives to Reduce the Emission of Harmful Air Pollutants

The chemical industry designated 12 harmful air pollutants among a number of harmful air pollutants as subject to voluntary management and has implemented measures to reduce emissions from these pollutants.

The UBE Group uses six of the 12 substances, namely: benzene, butadiene, acrylonitrile, 1,2-dichloroethane, chloroform and dichloromethane. Regarding benzene and butadiene, which are suspected to be particularly harmful, the Group promoted a drastic reduction of their emissions and achieved reductions of 98% and 91%, respectively, compared with fiscal 1995. In addition, the Group attained a 96% reduction in total emissions.

### Voluntary Medium-Term Plan for Reducing Chemical Substance Emissions

The UBE Group has established a plan to reduce total emissions of 12 voluntarily selected chemical substances—of which a large volume is emitted—by 60% in fiscal 2009, compared with the 2000 level. Targeted chemical substances are: ammonia, caprolactam, xylene, vinyl acetate, cyclohexane, dichloromethane, toluene, 1,3-butadiene, butyl alcohol, n-hexane, benzene, methyl alcohol. Owing to efforts made in this area and a decrease in production volume in fiscal 2008, the Group reduced emissions of these substances by 64%.

In fiscal 2008, a cyclohexane recovery facility was installed at the Ube Chemical Factory’s cyclohexanone production facility.
Initiatives for Environment and Safety
Management of Chemical Substances

UBE Group CSR Report 2009

Among the 354 substances designated under the PRTR law, the UBE Group handles 50 of them, and UBE handles 38. Furthermore, in fiscal 2005 the Group started surveying VOCs related to the 480 substances designated by the Japan Chemical Industries Association (JCIA). Of these, 85 substances are handled by the Group as a whole and 74 by UBE itself.

In fiscal 2007, our total emissions of the substances specified by the JCIA, including VOCs, were reduced by 28% from the previous year due to a fall in production volume. For the emissions of each substance, the Group endeavors to make reductions by installing and operating exhaust gas treatment systems in factories and improving production processes (closed handling areas and alternative solvent usage).

- **PCB (Polychlorinated Biphenyl)**
  Regardless of whether they are currently in use or no longer in use, the UBE Group controls PCB-containing transformers, condensers and fluorescent lighting stabilizers in its factories in accordance with the Law Concerning Special Measures against PCB Waste. The Group plans to store and treat PCBs in an appropriate and safe manner up until July 2018. We have engaged regional facilities of Japan Environmental Safety Corporation (JESCO) to provide such storage. Moreover, JESCO is already treating some of these substances.

- **Countermeasures for Soil and Ground Water Pollution**
  The UBE Group conducts surveys and initiates measures in accordance with the Soil Contamination Countermeasures Law and ordinances established by local governments.

**UBE Group Data on PRTR Substances**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Total handling volume</th>
<th>Emissions volume</th>
<th>Increase/decrease rate compared with fiscal 2007 (total emissions)</th>
<th>Transfer volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRTR Law basis</td>
<td>632,532</td>
<td>Atmosphere 363.7, Public water 143.0, Soil 0.0, Total 506.7</td>
<td>(19)%</td>
<td>1,794.2</td>
</tr>
<tr>
<td>JCIA basis</td>
<td>1,913,465</td>
<td>Atmosphere 1,066.2, Public water 200.0, Soil 0.0, Total 1,266.8</td>
<td>(28)%</td>
<td>3,417.3</td>
</tr>
</tbody>
</table>

Transfer volume: Volume externally treated as waste

**Individual Emission Volumes (Limited to the Top 12 Substances Subject to the PRTR Law and Dioxins)**

<table>
<thead>
<tr>
<th>Ordinance designation number</th>
<th>Chemical substance</th>
<th>CAS No.</th>
<th>Handling volume</th>
<th>Emission volume</th>
<th>Increase/decrease rate compared with fiscal 2007 (emissions)</th>
<th>Transfer volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>227</td>
<td>Toluene</td>
<td>108-88-3</td>
<td>1,063</td>
<td>153.3, Atmosphere 19.9, Public water 0.0, Soil 0.0, Total 173.2</td>
<td>(8)%</td>
<td>514.6</td>
</tr>
<tr>
<td>61</td>
<td>δ-caprolactam</td>
<td>105-60-2</td>
<td>205,877</td>
<td>0.0, Atmosphere 90.9, Public water 0.0, Soil 90.9</td>
<td>(22)%</td>
<td>444.9</td>
</tr>
<tr>
<td>63</td>
<td>Xylene</td>
<td>*</td>
<td>167</td>
<td>54.6, Atmosphere 0.0, Public water 0.0, Soil 54.6</td>
<td>(13)%</td>
<td>18.4</td>
</tr>
<tr>
<td>40</td>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>45</td>
<td>35.0, Atmosphere 0.0, Public water 35.0</td>
<td>(21)%</td>
<td>10.1</td>
</tr>
<tr>
<td>102</td>
<td>Vinyl acetate</td>
<td>108-05-4</td>
<td>3,611</td>
<td>23.7, Atmosphere 0.0, Public water 0.0, Soil 23.7</td>
<td>(21)%</td>
<td>0.0</td>
</tr>
<tr>
<td>268</td>
<td>1,3-butadiene</td>
<td>106-99-0</td>
<td>86,233</td>
<td>18.1, Atmosphere 0.0, Public water 0.0, Soil 18.1</td>
<td>(36)%</td>
<td>0.0</td>
</tr>
<tr>
<td>299</td>
<td>Benzene</td>
<td>71-43-2</td>
<td>83,708</td>
<td>16.9, Atmosphere 0.6, Public water 0.0, Soil 17.5</td>
<td>(23)%</td>
<td>0.0</td>
</tr>
<tr>
<td>85</td>
<td>Chlorodifluoromethane (HCFC-22)</td>
<td>75-46-6</td>
<td>14</td>
<td>13.5, Atmosphere 0.0, Public water 0.0, Soil 13.5</td>
<td>(76)%</td>
<td>0.0</td>
</tr>
<tr>
<td>244</td>
<td>1, 3, 5 trimethylbenzene</td>
<td>108-67-8</td>
<td>13</td>
<td>9.4, Atmosphere 0.0, Public water 0.0, Soil 9.4</td>
<td>(61)%</td>
<td>0.0</td>
</tr>
<tr>
<td>304</td>
<td>Boron and boron compound</td>
<td>*</td>
<td>51</td>
<td>0.8, Atmosphere 4.4, Public water 0.0, Soil 5.2</td>
<td>10%</td>
<td>0.9</td>
</tr>
<tr>
<td>177</td>
<td>Styrene</td>
<td>100-42-5</td>
<td>187</td>
<td>4.3, Atmosphere 0.0, Public water 4.3</td>
<td>(16)%</td>
<td>0.3</td>
</tr>
<tr>
<td>145</td>
<td>Dichloromethane (methylene chloride)</td>
<td>75-09-2</td>
<td>210</td>
<td>4.0, Atmosphere 0.0, Public water 4.0</td>
<td>9%</td>
<td>161.1</td>
</tr>
<tr>
<td>179</td>
<td>Dioxins</td>
<td>*</td>
<td>235</td>
<td>221, Atmosphere 13.0, Public water 234</td>
<td>(22)%</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Notes:
1. CAS No.: Chemical Abstract Service registry number.
2. *: Contains various compounds
3. Unit for dioxins: mg-TEQ/year

**Glossary**

1. **PRTR (Pollutant Release and Transfer Register):** Involves conducting voluntary surveys to assess the volume of chemical substances that are emitted into the environment (atmosphere, water, soil) and transferred outside in the form of waste from company facilities during business activities and reporting survey findings to national and other governments while undertaking full public disclosure. The aim of PRTR is to take steps to control and reduce environmental burdens through the appropriate use and management of chemical substances.
2. **VOCs (Volatile Organic Compounds):** Collective term referring to organic chemical compounds that vaporize easily and enter the atmosphere. VOCs are arguably one of the sources of suspended particle matter and photochemical oxidants.
**Toward a Recycling-Based Society: Promoting Waste Recycling**

The UBE Group is promoting waste recycling and thus using a wide variety of waste generated from within and outside of the Group as fuel and raw materials for cement production.

**Waste Recycling at Cement Factories**

Waste can be used as a raw material (material cycle) and fuel (thermal cycle) in the cement-making process. For this reason, a wide variety of waste is treated at cement factories. The high calcining temperature of the cement kilns (1,450°C) burns and degrades substances that cannot be treated by ordinary incinerators. The kilns also offer a large waste-processing capacity. 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.

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 (see Flow diagram below for a breakdown). In fiscal 2008, the Group’s cement factories made effective use of around 3.38 million tons of waste and byproducts. Of this, about 3.3 million tons was sourced from outside of the UBE Group. This is one way the Group is contributing to the formation of a recycling-based society.

In 2009, in addition to expanding capacity to the facilities for treating refuse ash generated by incinerating residual waste, the Kanda Factory also plans to add capacity to its waste plastic treatment facility. UBE will refuse ash generated by incinerating residual waste, the Kanda Factory also.

---

**Cement Factory History of Waste Treatment Facility Installations**

<table>
<thead>
<tr>
<th>Year</th>
<th>Facility Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Kanda Factory: Fly ash treatment facility</td>
</tr>
<tr>
<td>2009</td>
<td>Kanda Factory: Waste plastic treatment facility (3rd period)</td>
</tr>
<tr>
<td>2008</td>
<td>Kanda Factory: Waste for raw material</td>
</tr>
<tr>
<td>2007</td>
<td>Ube Factory: Chlorine bypass system</td>
</tr>
<tr>
<td>2006</td>
<td>Ube Factory: Wood chip combustion facility for in-house power generation</td>
</tr>
<tr>
<td>2005</td>
<td>Kanda Factory: High-chlorine bypass system</td>
</tr>
<tr>
<td>2004</td>
<td>Isa Factory: Waste plastic treatment facility</td>
</tr>
<tr>
<td>2003</td>
<td>Isa Factory: Plastic waste treatment facility</td>
</tr>
<tr>
<td>2002</td>
<td>Kanda Factory: Waste for raw material</td>
</tr>
<tr>
<td>2001</td>
<td>Ube Factory: Sewage sludge treatment facility</td>
</tr>
<tr>
<td>2000</td>
<td>Ube Factory: Waste plastic treatment facility (1st period)</td>
</tr>
<tr>
<td>1999</td>
<td>Ube Factory: Plastic waste treatment facility</td>
</tr>
<tr>
<td>1998</td>
<td>Kanda Factory: Waste oil treatment facility</td>
</tr>
</tbody>
</table>

---

**Flow of Waste and Byproduct Utilization in Cement Factories in Fiscal 2008**

<table>
<thead>
<tr>
<th>Waste for raw materials</th>
<th>225 tons/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal ash</td>
<td>109 kg/t</td>
</tr>
<tr>
<td>Sludge</td>
<td>42 kg/t</td>
</tr>
<tr>
<td>Slag</td>
<td>47 kg/t</td>
</tr>
<tr>
<td>Others</td>
<td>27 kg/t</td>
</tr>
<tr>
<td><strong>Total Waste and byproducts</strong></td>
<td><strong>338 tons/year</strong></td>
</tr>
</tbody>
</table>

**Cement production: 8.03 million tons/year**

---

**Guest Message**

**Recycling Waste within the Cement-Making Process**

Our Shinko Kobe Power Station is a coal-fired power plant with a 1,400MW total power generation and is Japan’s largest IPP providing electricity to the Kansai Electric Power Co., Inc.

UBE takes coal ash as a raw material for cement and is our most important partner. While its coal ash storage silo capacity is limited and situated in an urban area, since it began operation, it has accommodated our needs in a steady and timely manner.

I would like to see us further strengthen the relationship that we have developed thus far.

Hiroo Nishimura
Manager, Technology Control Div.
Shinko Kobe Power Inc.
Reducing Final Waste Disposal through Appropriate Industrial Waste Management

The entire UBE Group is taking steps to reduce industrial waste.

### Status of Industrial Waste Reduction Activities

- **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 and machinery factories generate waste oil and inorganic waste, etc.

- **Industrial Waste Recycling Volume**
  In the district of Ube, most of the Group’s internal industrial waste is recycled in-house.

- **Volume of Industrial Waste Discharged from Factories**
  When contracting waste treatment or disposal to outside companies, the UBE Group utilizes industrial waste management forms (waste manifest system) in compliance with the waste treatment and clean-up laws and strictly monitors the entire process until final disposal.

- **Volume of Industrial Waste for External Final Disposal**
  We achieved an 81% reduction, reaching our medium-term fiscal 2008 target of a 60% reduction ahead of schedule.

---

**Initiatives for Environment and Safety**

**Reduction of Industrial Waste**

**Medium-Term Plan for Voluntary Waste Reduction**

Targets call for a Group-wide reduction of external final disposal by 60% within fiscal 2009, as compared with the fiscal 2000 level.

**Overall Flow of Industrial Waste in Fiscal 2008**

- Industrial waste generation volume: 631,261t
- Volume of waste discharged from factories: 217,443t
- Volume of industrial waste for external final disposal: 6,123t

### Glossary

- Refuse Derived Fuel (RDF): Solid fuel made by compressing waste plastic, scrap wood and general garbage.
Making Ongoing Efforts to Prevent Air and Water Pollution

The UBE Group has long been engaged in pollution prevention. For more than 60 years, we have been working to keep air and water pollution at bay by applying the “Ube Method,” which involves joint efforts with manufacturers, governmental authorities, academia and local communities.

Measures to Prevent Air and Water Pollution

- **Measures to Prevent Air Pollution**
  The UBE Group monitors contaminants emitted into the atmosphere at the source, and pollution control is undertaken according to levels established in agreement with local governments and our own voluntary air pollution prevention management standards. All of this is reflected in our factory operations.

- **Measures to Prevent Water Pollution**
  The UBE Group has installed systems to monitor discharges of pollutants in water environments. In addition, UBE Group chemical plants, which can have a major impact on public water quality, discharge wastewater only after it has been purified owing to the installation of wastewater treatment facilities.

- **Measures to Prevent Odors**
  The UBE Group is striving to reduce odors in the Ube district, in cooperation with local governments, by utilizing public facilities that continuously monitor environmental measurement data throughout Ube City and by independently establishing an odor monitoring system. The Group has also installed deodorizing and other equipment that has led to a decline in odor complaints. There have been no complaints reported in other districts.

### Glossary

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

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

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

- **Total phosphorus, total nitrogen**
  These are indicators related to the maintenance of living environments in oceans and lakes.

### Tables and Graphs

- **SOx Emissions**
- **NOx Emissions**
- **Dust Emissions**
- **Wastewater Emissions**
- **COD Emissions**
- **Total Phosphorus Emissions**
- **Total Nitrogen Emissions**
- **Odor Complaints in Ube City**

---

*FY* indicates fiscal year (April 1 - March 31).
Implementing Occupational Safety and Health Measures to Ensure that Employees Can Work Safely

Based on its principle of “Ensuring operational safety shall be the priority in all areas and activities under UBE’s commitment to respect human life,” the UBE Group promotes the introduction of measures for occupational safety and health at all its sites.

Measures to Prevent Occupational Accidents

To eradicate occupational accidents, the UBE Group promotes a variety of activities, including risk prediction training, TPM activities, Hiyari-Hatto activities (to promote measures that prevent near misses), confirmation of safety through actions and set phrases, accident case studies, risk assessment, and custom-designed, experience-based training. Concurrently, UBE regularly audits its safety management systems and provides advice, including recommendations for improvement.

Safety and Health Committee meetings are held at all factories on a monthly basis, providing the opportunity for participants, including management and labor representatives, to report and discuss safety-related issues.

The UBE Group holds an annual Group Safety and Health Conference where safety awards are presented and employees, including those from partner companies, have an opportunity to increase their awareness of safety issues.

Based on the results achieved in fiscal 2008, actions are being taken in small groups at all UBE factories and other facilities with the aim of completely avoiding lost work days due to accidents in fiscal 2009.

Acquisition of OSHMS Certification

The UBE Group has established Occupational Safety and Health Management Systems (OSHMS) as a framework for its accident reduction efforts and encourages all Group companies to acquire OSHMS certification. As a result, all UBE factories and laboratories have acquired the certification (see page 44).

Measures against Asbestos

The UBE Group recommends that employees who have handled asbestos-related products, including those who are now retired, undergo health examinations and responds in good faith through such actions as cooperating in the submission of industrial accident applications by individuals whose examination results warrant medical attention. The Group also conducted surveys to determine if buildings and manufacturing facilities contained asbestos and appropriately treated locations where a high rate of asbestos diffusion was found. For locations where there is a significant possibility of asbestos diffusion in the future, the Group is promoting systematic measures for the disposal and replacement of asbestos materials. Moreover, insulation and gaskets are replaced regularly with substitute products when piping is opened.

Prior Safety Assessment of Chemical Substances

Based on procedures designated in the safety assessment standards, we also perform in advance safety assessments of chemical substances that we have developed or plan to start handling. In fiscal 2008, the UBE Group performed 30 chemical substance safety assessments.

Causes of UBE Group Occupational Accidents (Percentage of all accidents) (%)

<table>
<thead>
<tr>
<th>Causes</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination</td>
<td>27</td>
<td>36</td>
<td>41</td>
<td>41</td>
<td>56</td>
</tr>
<tr>
<td>Unsafe actions</td>
<td>64</td>
<td>49</td>
<td>43</td>
<td>48</td>
<td>37</td>
</tr>
<tr>
<td>Defective equipment</td>
<td>7</td>
<td>12</td>
<td>9</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

Combination: Unsafe actions and defective equipment

Lost-Time Injury Frequency Rate*1

*1 Frequency rate = (Number of lost-time injuries/total work hours) x 1,000,000 hours

*2 Data on lost-time industry frequency rates for the manufacturing, chemical, and cement industries is based on statistics supplied by the Ministry of Health, Labour and Welfare
Working to Maintain Process Safety and Safe Facility Operations

Safe facility operations is a key mission for the security of employees and local residents. We are spreading a culture of safety throughout the entire UBE Group.

Taking Steps to Maintain Process Safety and Safe Operations

- **Plant Safety Assessment**
  The methods stipulated in the plant environment and safety assessment standards are followed when carrying out pre- and post-plant safety assessments of newly installed, additional, or modified facilities. In fiscal 2008, the UBE Group carried out 47 environment and safety assessments of new installations and facility modifications.

- **Emergency Training**
  Each month a variety of safety-related activities are conducted at the sites of the UBE Group. These include emergency drills, mutual workplace checks by safety supervisors, and mutual safety patrols with partner companies. The status of training is also posted on our website so that it is informative even to those who have not participated in training or patrols.

- **High-Pressure Gas Equipment, Boiler and Class-1 Pressure Vessel Inspector Certification**
  At factories where the treatment of high-pressure gas has been approved by the Japanese government, we acquire and update inspector certification for post completion/safety inspections based on the High Pressure Gas Safety Law. In addition, at factories equipped with boilers and Class-1 pressure vessels, we acquire and update inspector certification for inspections during operation, based on the Industrial Safety and Health Act. By so doing, we improve the safety management system with the aim of further improving the safety of these factories. In fiscal 2008, the Sakai Factory updated its certification. (See page 44 for details.)

- **Environment & Safety Qualification**
  We encourage employees to obtain legally recognized qualifications for the safe operation and management of our workplace.

<table>
<thead>
<tr>
<th>Qualification</th>
<th>UBE Group</th>
<th>UBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollution control managers and chiefs</td>
<td>573</td>
<td>427</td>
</tr>
<tr>
<td>Environmental measurement experts</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Working environment measurement experts</td>
<td>66</td>
<td>57</td>
</tr>
<tr>
<td>Health supervisors</td>
<td>400</td>
<td>310</td>
</tr>
<tr>
<td>Energy supervisors</td>
<td>295</td>
<td>226</td>
</tr>
<tr>
<td>Hazardous materials supervisors</td>
<td>5,226</td>
<td>3,916</td>
</tr>
<tr>
<td>Operation chiefs for handling of specified chemical substances</td>
<td>1,019</td>
<td>653</td>
</tr>
<tr>
<td>High-pressure gas production safety officers</td>
<td>1,673</td>
<td>1,425</td>
</tr>
<tr>
<td>Boiler technicians</td>
<td>1,407</td>
<td>1,052</td>
</tr>
</tbody>
</table>

Number of Employees with Environment & Safety-Related Qualifications (as of April 2009) (Unit: Employees)

**Occupational Safety, Health and Disaster Prevention Expenditure of UBE Group**

<table>
<thead>
<tr>
<th>Years</th>
<th>Measures to improve occupational safety and working environment</th>
<th>Measures for aging plants</th>
<th>Measures for earthquakes and other natural disasters</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>'04</td>
<td>5,741</td>
<td>14</td>
<td>8,526</td>
<td>0</td>
</tr>
<tr>
<td>'05</td>
<td>4,121</td>
<td>14</td>
<td>6,305</td>
<td>0</td>
</tr>
<tr>
<td>'06</td>
<td>5,608</td>
<td>14</td>
<td>5,608</td>
<td>0</td>
</tr>
<tr>
<td>'07</td>
<td>6,305</td>
<td>14</td>
<td>4,121</td>
<td>0</td>
</tr>
<tr>
<td>'08</td>
<td>8,526</td>
<td>14</td>
<td>5,741</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years</th>
<th>FY</th>
<th>Millions of yen</th>
</tr>
</thead>
<tbody>
<tr>
<td>'04</td>
<td>0</td>
<td>8,526</td>
</tr>
<tr>
<td>'05</td>
<td>1</td>
<td>6,305</td>
</tr>
<tr>
<td>'06</td>
<td>2</td>
<td>5,608</td>
</tr>
<tr>
<td>'07</td>
<td>3</td>
<td>4,121</td>
</tr>
<tr>
<td>'08</td>
<td>4</td>
<td>5,741</td>
</tr>
</tbody>
</table>

UBE Group Facility-Related Accidents (including environmental accidents) (Unit: Accidents)

<table>
<thead>
<tr>
<th>Years</th>
<th>UBE</th>
<th>Group companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2006</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2007</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Guest Message

**In Pursuit of Safety and Security**

Most accidents involving hazardous materials comprise many factors in the process leading up to them and these factors become entangled inevitably or by chance. In order to construct a voluntary safety system for the safety and security of local residents and for the development of society, not only must a company understand compliance, but the company’s employees must also personally understand the risk factors based on the characteristics of the facility. To identify and implement the best measures is extremely important, and as firefighters, we have high expectations.

In order to guide these company efforts in a fruitful direction, it is vital that the public and private sectors cooperate to prevent accidents and thereby assure co-existence and co-prosperity. In order to improve, strengthen and maintain the company’s safety system, we firefighters wish to be good, trustworthy partners.

Kazuhiko Toshishige
Manager of Ube City Fire Station
Socially Valuable Products and Technologies of UBE Group

The UBE Group provides a large variety of products and technologies, ranging from those related to the automobile and information industries to those in use in society, its accompanying infrastructure and daily life. The Group actively promotes projects that enable reductions in CO₂ emissions and the creation of a recycling-based society in all of its business fields and works hard to provide “products and technologies that are friendly to both humans and the environment.” Introduced here are some of the UBE Group’s products, which total more than 500.

Legend: Product benefits
- Reducing CO₂ emissions: Reducing emissions of greenhouse gases known to contribute to global warming
- Recycling: Reusing waste or improving the quality of waste for effective recycling and utilization of resources
- Purification of water: Improving the quality of water and sterilizing water to preserve a clean environment
- Energy saving: Streamlining through weight reduction and improving efficiency in terms of fuel, equipment, time and processes
- Controlling emissions of toxic substances: Not emitting toxic substances
- Providing environment-conscious products: Producing and using alternative products that are friendly to the environment
- Contributing to a better life

Automotive-Related Fields

UBE supports auto manufacturing with environment-friendly materials and components.

1. Fuel tubes: UBESTA
2. Air intake manifolds: UBE NYLON 6
3. Power module substrates: High-purity silicon nitride powder
4. Engine covers: UBE NYLON 6
5. Engine blocks: Die-casting machines

Chemicals

1. Polybutadiene rubber
   UBEPOL BR, UBEPOL VCR
   Synthetic Rubber Business Unit
   Applications: Automotive tires, footwear, polystyrene quality improvement agent, etc.
   Features: More elastic and rub-resistant than natural rubber. Among the wide variety of UBE’s specialty products, UBEPOL VCR is a groundbreaking product, enabling reduced weight in rubber products.

2. Polyamide resin
   Nylon 6: UBE NYLON 6
   Nylon 12: UBEASTA, UBEASTA XPA
   Nylon Engineering Plastics Business Unit
   Applications: Automotive components including air intake manifold, food packaging film, monofilament, etc.
   Features: It is the strongest resin among engineering plastics. Often used for automotive components due to its good thermal and chemical resistance and better processing, helping to reduce weight and lower fuel consumption. Suitable for food packaging with a long shelf life because of its superior oxygen gas barrier property. Caprolactam and laurolactam are the raw materials and are produced by the UBE Group.

3. Raw material for waterborne coating and artificial leather
   A. Polyurethane dispersion (ETERNACOLL UW series)
   B. Polycarbonatediol (ETERNACOLL UM series)
   Fine Chemicals Business Unit
   Applications: Automotive waterborne coating, artificial leathers for luxury cars
   A. Features: As waterborne polyurethane, contributes to the reduction of VOCs (volatile organic compounds)
   B. Features: Uses the primary material for high-grade polyurethane applications (waterborne coating, high-durable PU resins, artificial leathers), which have low environmental impact.

4. Powder coating-curing agent: 1,12-dodecanedioic acid
   Fine Chemicals Business Unit
   Applications: Curing agent for powder coating material used for automotive wheels
   Features: As a resin curing agent for powder coating material, helps reduce VOC emissions.

Cement & Construction Materials

5. Basic magnesium sulfate
   A. MOS-HIGE A
   B. MOS-HIGE Hybrid
   Ube Material Industries, Ltd.
   A. Applications: Resin filler, replacement for asbestos
   Features: Helps reduce the weight of automotive HP resins components
   B. Applications: Treat wastewater generated by chemical mechanical polishing (CMP) process
   Features: Recycles CMP-related wastewater.

Machinery & Metal Products

6. Aluminum wheels
   Squeeze-cast aluminum wheels
   UBE ALUMINUM WHEELS Ltd.
   Applications: Automotive wheels. Used as genuine wheels for luxury cars (sedans, SUVs) and hybrid cars of Japanese and other automakers.
   Features: Achieves a 10-20% weight reduction from conventional casting models, leading to higher energy efficiency.

7. Die-Casting Machines
   Ube Machinery Corporation, Ltd.
   Applications: Automotive aluminum components, including engine blocks and transmission cases
   Features: Achieves higher energy and space efficiencies and greater functionality. Machines are the world’s smallest of their kind.
Pharmaceuticals and Lifestyle-Related Fields

UBE Group Products and Technologies are used in all aspects of modern life.

**Chemicals**

1. **Polyamide film UPLEX Series**
   - **Applications:** Base material for ICs used in digital equipment, such as LCD TVs and mobile phones.
   - **Features:** Well-suited for ICs used for high-resolution circuits due to its high dimensional stability with high heat resistance and rigidity.

2. **Metal organic compounds (MO)**
   - **Applications:** Raw material for Light-Emitting Diodes (LED)
   - **Features:** Requires less electricity and lasts longer than conventional light bulbs.

3. **Functional electrolytes for lithium-ion batteries**
   - **Applications:** Electrolytes for lithium-ion batteries
   - **Features:** Electrolytes designed to customer requirements with the combination of highly purified electrolyte and additives for controlling battery performance.

4. **Recycle compound UBE-COMPOSITE**
   - **Applications:** Home appliances, automotive components, stationery
   - **Features:** Color-adjusting recycle compound, which can change the color tone of waste plastics.

5. **Hydrogen peroxide**
   - **Applications:** Bleaching and sterilizing of pulp and paper
   - **Features:** Reduced environmental impact of related processes. Generates non-hazardous, non-toxic water and oxygen when decomposed. Replacement for chlorine.

6. **Polyimide film**
   - **Applications:** Used as raw material for UV-curing coating/adhesive material, helping reduce VOC emissions.
   - **Features:** Manufactured using a dry process that uses neither solvents nor inorganic fillers, making it eco-friendly and contaminant free.

7. **B. DPC (diphenyl carbonate)**
   - **Applications:** Medicine that controls the buildup of platelets within blood vessels.
   - **Features:** Approved for sale in Europe and the United States. Daiichi Sankyo Co., Ltd. and Eli Lilly and Co. are responsible for sales operations. Joint development with Daiichi Sankyo Co., Ltd.

8. **A. POLYWRAP**
   - **Applications:** Food wrapping film and additive-free polyethylene wrapping film
   - **Features:** No emission of dioxin or other toxic gases when combusted because it contains no chlorine.

9. **Dehumidifying material: HELIOFRESH**
   - **Applications:** Synthetic fragrance for perfume and toiletry products
   - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

10. **Hydrogen peroxide**
    - **Applications:** Used as raw material for UV-curing coating/adhesive material, helping reduce VOC emissions.
    - **Features:** Manufactured using a dry process that uses neither solvents nor inorganic fillers, making it eco-friendly and contaminant free.

11. **Microporous Polyolefin Film UPORE**
    - **Applications:** Lithium-ion battery separators
    - **Features:** Manufactured using a dry process that uses neither solvents nor inorganic fillers, making it eco-friendly and contaminant free.

12. **Material for fragrance and toiletry products HELIOFRESH**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

13. **Material for fragrance and toiletry products**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

14. **Shoe soles: PURELYTE, UPORE, SIMTEX**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

15. **A. Anti-allergic agent TALION**
    - **Applications:** Medicine to lower blood pressure
    - **Features:** Approved for sale in Europe and the United States. Daiichi Sankyo Co., Ltd. and Eli Lilly and Co. are responsible for sales operations. Joint development with Daiichi Sankyo Co., Ltd.

16. **B. Antihypertensive agent CALBLOCK**
    - **Applications:** Medicine to lower blood pressure
    - **Features:** Calcium blocker. Joint development with Daiichi Sankyo Co., Ltd., which is also responsible for sales operations.

17. **B. Shrink film**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

18. **Anti-allergic agent: TALION**
    - **Applications:** Medicine to lower blood pressure
    - **Features:** Approved for sale in Europe and the United States. Daiichi Sankyo Co., Ltd. and Eli Lilly and Co. are responsible for sales operations. Joint development with Daiichi Sankyo Co., Ltd.

19. **B. Applications:** CDs, DVDs and other optical uses, frames for home appliances and other products.
    - **Features:** Calcium blocker. Joint development with Daiichi Sankyo Co., Ltd., which is also responsible for sales operations.

20. **A. Anti-allergic agent TALION**
    - **Applications:** Medicine to lower blood pressure
    - **Features:** Approved for sale in Europe and the United States. Daiichi Sankyo Co., Ltd. and Eli Lilly and Co. are responsible for sales operations. Joint development with Daiichi Sankyo Co., Ltd.

21. **B. Antihypertensive agent CALBLOCK**
    - **Applications:** Medicine to lower blood pressure
    - **Features:** Calcium blocker. Joint development with Daiichi Sankyo Co., Ltd., which is also responsible for sales operations.

22. **B. Applications:** CDs, DVDs and other optical uses, frames for home appliances and other products.
    - **Features:** Calcium blocker. Joint development with Daiichi Sankyo Co., Ltd., which is also responsible for sales operations.

23. **A. Anti-allergic agent TALION**
    - **Applications:** Medicine to lower blood pressure
    - **Features:** Approved for sale in Europe and the United States. Daiichi Sankyo Co., Ltd. and Eli Lilly and Co. are responsible for sales operations. Joint development with Daiichi Sankyo Co., Ltd.

24. **B. Antihypertensive agent CALBLOCK**
    - **Applications:** Medicine to lower blood pressure
    - **Features:** Calcium blocker. Joint development with Daiichi Sankyo Co., Ltd., which is also responsible for sales operations.

25. **Flooring materials: Self-leveling materials**
    - **Applications:** Used as raw material for UV-curing coating/adhesive material, helping reduce VOC emissions.
    - **Features:** Manufactured using a dry process that uses neither solvents nor inorganic fillers, making it eco-friendly and contaminant free.

26. **Material for fragrance and toiletry products HELIOFRESH**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

27. **Interior materials: YASASHII KABE**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

28. **External wall material: UB Board light, UB Board 16-15**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).

29. **Sash: Extrusion presses**
    - **Applications:** Synthetic fragrance for perfume and toiletry products
    - **Features:** As a replacement for natural fragrance, reduces the need to log sassafras trees (a kind of lauraceae).
Information, Electronics and Communications-Related Fields

Sophisticated environmental technologies are the cornerstone of materials that contribute to the foundation of society.

1. Polystyrene quality improvement agent for office equipment housing: UBEPOL BR
   - Applications: Used repetitively after drying in the sun.
   - Features: Used to harden epoxy resins. Incombustible due to its special resin structure, eliminating the need to use halogenated flame retardant. Environment-friendly, halogen-free material.

2. High-strength polypropylene fiber SIMTEX
   - Applications: Nickel-hydrogen battery separator equipped on hybrid cars
   - Features: Proprietary technology is used to realize control of alkaline dissolution speed, high-sensitivity, and high-resolution film, while contributing to the increasing precision of LCD panels and low energy consumption

3. Silica particles MIPRESICA
   - Applications: Spacer for liquid crystal displays
   - Features: Providing single dispersal with a spherical shape, this is ideal as a spacer (a gap material used to maintain the liquid crystal at an even thickness), essential to high-performance liquid-crystal displays.

4. Phenol resin MEH-7851
   - Applications: Molding of semiconductors used in hybrid and electric vehicles, computers and cellular phones
   - Features: This all-electric machine can achieve substantial reduction in energy consumption compared to general hydraulic injection molding machine.

5. Cresol resin MER-7959
   - Applications: The raw materials of the photoresist used for circuit formation in the LCD panels of LCD TVs, providing single dispersal with a spherical shape, this is ideal as a spacer (a gap material used to maintain the liquid crystal at an even thickness), essential to high-performance liquid-crystal displays.

6. Sealant for electronic materials: Oxetane
   - Features: Producing single dispersal with a spherical shape, this is ideal as a spacer (a gap material used to maintain the liquid crystal at an even thickness), essential to high-performance liquid-crystal displays.

7. LED raw materials for liquid crystal display backlight: Metal organic compounds (MO)
   - Applications: Base material for PDP protective layers and phosphors
   - Features: Production through a vapor oxide reaction that occurs when high-purity magnesium vapor combines with oxygen.

8. LED raw materials for liquid crystal display backlight: Metal organic compounds (MO)
   - Applications: Injection molding machines
   - Features: Primarily made from natural diatomite. Capable of humidity conditioning and absorption and decomposing of VOCs that cause sick building syndrome, helping to maintain a pleasant living environment.

   - Features: Hydrogen peroxide
   - Applications: Dehydrating of forest products, paper bleaching, etc.

10. Lithium-ion batteries: PURELYTE, UPORE
    - Applications: Large-scale TV frames: Metal organic compounds
    - Features: Used to harden epoxy resins. Incombustible due to its special resin structure, eliminating the need to use halogenated flame retardant. Environment-friendly, halogen-free material.

11. Injection molding machines
    - A. Extrusion presses
    - B. Injection molding machines (All-electric IM)

Machinery & Metal Products

12. Oxidized magnesium, a vapor-deposited, high-purity fine powder: magnesium powders
    - Applications: Base material for FPD protective layers and phosphors
    - Features: Produced through a vapor oxide reaction that occurs when high-purity magnesium vapor combines with oxygen.

13. Dehumidifying material KARATTO-KAIMIN
    - Applications: Dehumidifying material for clothes and mattresses
    - Features: The main component is Type B silica gel, capable of being used repetitively after drying in the sun.

14. Cement & Construction Materials
    - Features: Proprietary technology is used to realize control of alkaline dissolution speed, high-sensitivity, and high-resolution film, while contributing to the increasing precision of LCD panels and low energy consumption

15. Self-leveling materials
    - Applications: Flooring material
    - Features: Its rapid-hardening property allows smooth and flat flooring to be completed within a short period, helping to accelerate the entire construction period.

16. Sealant for electronic materials: Oxetane
    - Features: Producing single dispersal with a spherical shape, this is ideal as a spacer (a gap material used to maintain the liquid crystal at an even thickness), essential to high-performance liquid-crystal displays.

17. Resin monomers for CD/DVDs: DPC (diphenyl carbonate)
    - Features: Used to harden epoxy resins. Incombustible due to its special resin structure, eliminating the need to use halogenated flame retardant. Environment-friendly, halogen-free material.

18. Large-scale TV frames: Injection molding machines
    - Applications: Aggregate materials for car bumpers and aluminum sash for window frames
    - Features: Japan’s sole extrusion maker meets the diverse needs of countries around the world through creative technologies and development capabilities for complex and intricate extrusion molding.

19. Liquid crystal spacer: HIPRESICA
    - Applications: Spacer for liquid crystal displays
    - Features: Providing single dispersal with a spherical shape, this is ideal as a spacer (a gap material used to maintain the liquid crystal at an even thickness), essential to high-performance liquid-crystal displays.

20. Molding of semiconductors: Phenol resin
    - Applications: Nickel-hydrogen battery separator equipped on hybrid cars
    - Features: This all-electric machine can achieve substantial reduction in energy consumption compared to general hydraulic injection molding machine.
Industrial and Social-Related Fields
Helping to build social infrastructure based on advanced environmental technologies.

- **34** On board inert gas generating systems: UBE N₂ Separator
- **36** Heat insulation material: UPLEX Foam
- **47** Sediment improvement agents: CLEAR WATER
- **45** Soil stabilizer: Super Green Lime
- **2** Fishing net: UBE NYLON 6
- **25, 26, 27, 28, 43** Large-scale facilities and homes: Construction materials, cement
- **39** Hollow-structured films: for agricultural use: SUNNY COAT
- **34** CO₂ concentration: UBE carbon dioxide gas separation membranes
- **31** Fertilizers: Ammonium sulfate
- **30** Water purification: AQUA SOLUTION

**Research & Development**

**Photocatalytic fiber module AQUA SOLUTION**
Photocatalytic Products Team, Administration & Planning Department

- **Applications:** Sterilization of bath water; purification of plating rinse water
- **Features:** Utilizing light to purify water (photocatalytic reaction). A human and environment-friendly system without chemical use. Received the Environmental Minister’s Prize at the 2004 GSC Awards

**Chemicals**

- **31** A. Caprolactam
  - **Applications:** Nylon-6 raw material
  - **Features:** Production bases in Japan, Thailand and Spain. One of the world’s top three producers
- **B. Ammonium sulfate**
  - **Applications:** Raw material for nitrogen fertilizer
  - **Features:** Caprolactam byproduct material

- **32** Exhaust gas processing facility UBE RID
  - **Applications:** Capture exhaust emissions from semiconductor/LCD factories
  - **Features:** Complete capture of toxic hazardous gases/powders emitted from operations of semiconductor/liquid crystal factories

- **33** High-purity silicon nitride powder
  - **Applications:** Ball bearings for wind power generators, glow plugs for diesel engines, power module substrates for automobiles
  - **Features:** Wide range of applications because of its excellent durability and ability to prevent electrolytic corrosion.

- **34** Separation membranes
  - **A. UBE organic solvent (alcohol) dehydration membranes**
  - **B. UBE carbon dioxide gas separation membranes**
  - **C. Nitrogen separation membranes (UBE N₂ Separator)**
  - **Others:** Hydrogen separation membranes; Dehumidification membranes

**Research & Development**

**Thermal control film for space satellites: Thermal Blanket**
Aerospace Materials Business Group

- **Applications:** Thermal control material for aerospace applications
- **Features:** Thermal control film made from Upilex film with vapor-deposited aluminum and other materials. Offers superior environmental resistance in outer space and is widely used in Japanese satellites.

**Polyimide foam UPLEX Foam**
Aerospace Materials Business Group

- **Applications:** Thermal insulation and sound and vibration absorption in satellites, airplanes, etc.
- **Features:** Provides thermal, fire and environmental resistance not available in conventional foams.

**Nori seaweed farming material COMPOSE Pipe**
Ube-Nitto Kasei Co., Ltd.

- **Applications:** Pipes for non-seaweed farming
- **Features:** Better durability than traditional bamboo pipes. At the end of its lifecycle for the intended purpose, the pipe can be coated again and used as an agricultural pole and for other purposes.

**Plastic cardboard DANPLATE**
Ube-Nitto Kasei Co., Ltd.

- **Applications:** Returnable boxes, delivery containers, etc.
- **Features:** Returnable boxes made from DANPLATE are heavier-duty than paper ones. Can be used many times and is recyclable.

**Hollow-structured films for agricultural use SUNNY COAT**
Ube-Nitto Kasei Co., Ltd.

- **Applications:** House double curtains for agricultural use
- **Features:** Exhibits heat-retention effects with superior middle air layer. Curbs energy consumption when heating the house.

**Material for optical cables RASEN COMPOSE**
Ube-Nitto Kasei Co., Ltd.

- **Applications:** Raseren Compose spacers for optical cables
- **Features:** Ideal for protecting the optical fiber and high-density packages. Used in Japan’s nationwide optical communications network.
### Cement & Construction Materials

- **Waste treatment technologies**
  - A. High-chlorine bypass system
  - B. Sewage sludge treatment facilities
  - C. Sewage sludge transport system using JR’s containers
  - D. Facility to treat incineration ash from household waste
  - E. Waste strip-liquid treatment facility
  - F. Facility to produce fuel from waste plastic
  - G. Biomass wood chip manufacturing facility

  - **Material Recycling Div.**

- **Features:** Capable of treating waste with high-chlorine content waste, such as incineration ash from household waste and RDF.

- **Applications:** Removal of toxic materials contained in waste, such as incineration ash from household waste and RDF.

- **B. Features:** Facility that uses sewage sludge as cement material.

- **C. Features:** Reduces CO₂ emissions through modal shift. Uses deodorizer-equipped containers to reduce odor levels.

- **D. Features:** Facility to treat incineration ash resulting from disposal of household waste and digging out old ash from waste disposal sites when renovating the sites for long-term use.

- **E. Features:** Facility to detoxify waste oil and waste liquid.

- **F. Features:** Facility to crush waste plastics and produce alternative fuel (as opposed to fossil fuel).

- **G. Features:** Facility to produce wood chips from waste and thinned woods, which are used as fuel for electric power generation. Contributes to optimization of biomass resources.

### Machinery & Metal Products

- **Air Floating Conveyor**
  - **Ube Machinery Corporation, Ltd.**

  - **Applications:** Carries materials on a belt supported by continuous air flow

  - **Features:** Since the conveyor belt is fully sealed, neither dust nor fumes leaks outside. Maintenance costs are inexpensive.

- **Biomass-fueled water boiler**
  - **Binder Boiler**
  - **Ube Techno Eng. Co., Ltd.**

  - **Applications:** Water boiler using various types of biomass as fuel

  - **Features:** Boiler that can operate with a wide variety of biomass fuels (e.g., wood pellets, wood chips, and animal excrement).

- **Facility to improve water quality with micro-bubble ozone**
  - **MBQ**
  - **Ube Techno Eng. Co., Ltd.**

  - **Applications:** Denitration, sterilization of wastewater and reduction of sewage sludge volume

  - **Features:** With micro-bubble ozone, denitrifies and stabilizes wastewater and reduces the volume of sewage sludge effectively.

- **Klin Exhaust Heat Recovery Equipment**
  - **Ube Techno Eng. Co., Ltd.**

  - **Applications:** Recovers heat that is produced from the body of kilns

  - **Features:** Conventional kilns can be converted at low cost allowing for the recovery of exhaust heat as hot water.

- **Energy-saving grab bucket**
  - **Fukushima, Ltd.**

  - **Applications:** Grab bucket used at waste disposal facilities

  - **Features:** Reduces CO₂ emissions by about 28% compared to the conventional fixed pump type.

### Energy & Environment

- **Pressurized two-stage gasification process**
  - **EUP**
  - **EUP Business Unit**

  - **Applications:** Chemical recycling of waste plastics

  - **Features:** The world’s first commercial chemical recycling technology that turns organic waste into gas. Specifically, produces synthesis gas products out of waste plastics.

- **Facility to produce biomass fuel for power plants**
  - **Power Business Unit**

  - **Applications:** Dry and grind wood biomass (e.g., waste construction materials) at a dedicated grinding mill to use it in co-firing with coal in a pulverized coal boiler

  - **Features:** With a high co-firing ratio (9%, caloric basis), achieves a 100,000-ton annual reduction of CO₂ emissions at UBE’s PP power generation plant.
Chiba Petrochemical Factory
Location: 8-1 Gil Minami-Kaigan, Ichihara City, Chiba Prefecture
Start of operations: 1984
Site area: 484,000 m²
No. of employees: 194
Main products: Polyethylene, butadiene rubber, waterproofing materials, polyamide products (C0S)

Our factory is located in the coastal industrial area of Ichihara City, Chiba Prefecture, in a city that harmoniously coexists with nature and industry. We manufacture butadiene rubber, polyethylene petrochemical products and processed goods. We would like many people to visit the factory, and with "We value interaction" as our motto, we want to continue to develop into a better factory capable of satisfying everyone.

Makoto Aikawa, Factory Manager

UBE Chemical Factory
Location: 1978-10 Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1993
Site area: 671,000 m²
No. of employees: 1,090
Main products: Caprolactam, nylon resins, industrial chemicals, fine chemicals, high-purity chemicals, polyamide products, separation membranes, new materials, active pharmaceutical ingredients, intermediates

With the support of a great many people, including those in the local community, and as the mother factory for UBE’s chemical business, this factory currently produces a wide range of products, from caprolactam (the raw material used to make nylon), fine chemicals and specialty materials, to pharmaceutical products. We seek to be a factory that gains the trust of the local community—a factory that creates value and provides job satisfaction.

Junichi Misumi, Executive Officer, Factory Manager

Sakai Factory
Location: 3-1 Chikko Shimmachi, Nishiki-ku, Sakai City, Osaka
Start of operations: 1967
Site area: 463,000 m²
No. of employees: 283
Main products: Caprolactam, ammonia, liquefied carbon dioxide, electrolytes, separation membranes, polyamide products, recycled compounds

Our factory is located in Sakai City, which, as an environment model city, has announced the Cool City Proclamation. The factory manufactures chemical products and specialty materials and is taking proactive steps to conserve energy and resources. Our goal is to create a facility that contributes to the local community through dialogue with local residents and cooperation with the government. In 2009, we will again sponsor the Sakai/Semboku District Region Dialogue, and we look forward to your participation.

Kenji Yamagata, Factory Manager

Site Reports (UBE Group’s Environmental Performance for Targeted Companies and Principal Manufacturing Bases)

Chiba Petrochemical Factory
Location: 8-1 Gil Minami-Kaigan, Ichihara City, Chiba Prefecture
Start of operations: 1984
Site area: 562,000 m²
No. of employees: 211
Main products: Polyethylene, butadiene rubber, waterproofing materials, polyamide products (C0S)

To meet diversified customers’ needs, we manufacture special cement products, such as high-early-strength cement and low-heat cement. We use the waste and byproduct materials sent from all over the country as raw materials and fuels to make such cement. This allows us to use fewer natural resources and to make significant contributions toward becoming a recycling-based society.

Michio Maruoka, Factory Manager

Okinoyama Coal Center
Location: 1980-29 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1980
Site area: 635,000 m²
No. of employees: 88
Main products: Storage and distribution of coal and petroleum coke

In fiscal 2008, we handled more than 6 million tons of coal at Japan’s largest fuel coal import transshipment station, which provides a stable supply of coal, an important energy source for Japan. The Center intends to keep meeting customers’ expectations by conducting a range of on-site activities with partner companies, increasingly implement health and safety measures, environmental preservation and process safety and disaster prevention.

Sadao Fujimoto, Center Manager

UBE Cement Factory
Location: 1978-2 Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1923
Site area: 435,000 m²
No. of employees: 194
Main products: Cement, perlite

Located in Mine City—the site of the Shuhodo limestone caves, which commemorated their 100th anniversary since opening—our factory has one of the largest cement manufacturing and limestone mining operations in Japan. We have increased our waste treatment capacity by building an additional facility to treat waste plastic. We seek to become an “eco factory trusted by the community” by paying the utmost attention to environmental protection—as our plant and mine are located near residential areas—and by building and maintaining harmonious relations with the local community, participating in various local events and operating factory tours.

Masakazu Ikawa, Factory Manager

UBE Film, Ltd.
Location: 1020 Onoda, Sanyo-Onoda City, Yamaguchi Prefecture
Start of operations: 1964
Site area: 50,000 m²
No. of employees: 243
Main products: Wrapping film for home use, wrapping film for commercial use

We are committed to being a company that is able to contribute to society by providing a wide variety of films that use polyethylene resin as the main ingredient. All employees will work hard to ensure environmental management, safety and quality, and we will meet the demands of customers by manufacturing human- and environment-friendly wrapping film for home use and new Polywrap, as well as various polyolefin film products that provide functions essential for industrial use.

Hiroshi Nakamura, President

UBE Ammonia Industry, Ltd.
Location: 2579 Fujimagari, Ube City, Yamaguchi Prefecture
Start of operations: 1972
Site area: 176,000 m²
No. of employees: 88
Main products: Ammonia

We are the only company in Japan that produces ammonia from petroleum coke, or what is called “crude oil residue.” The use of this low-value raw material requires advanced production technology. That said, we will clearly position “safety first, environment second, quality third and manufacturing fourth” in our management policy and focus on safe, stable production. Incidentally, ammonia is also the basic raw material for fertilizers and chemical fibers.

Noboru Toyota, President

UBE-MC Hydrogen Peroxide, Ltd.
Location: 2579-78 Fujimagari, Ube City, Yamaguchi Prefecture
Start of operations: 1993
Site area: 13,000 m²
No. of employees: 34
Main products: Hydrogen peroxide

Our factory produces hydrogen peroxide, a very environmentally clean chemical that is the product of the decomposition of water and oxygen alone. We are working to abide by relevant laws and regulations and to achieve a zero-accident workplace based on the fundamental principle “safety takes precedence over all business.” By leveraging environmental management systems, we are proactively preserving and improving the environment and reducing our environmental impact.

Eiji Washimoto, Factory Manager

Isa Cement Factory
Location: 4768 Isao, Isao-cho, Mine City, Yamaguchi Prefecture
Start of operations: 1948
Site area: 255,000 m² (excluding mines)
No. of employees: 155
Main products: Cement, lime stone

Located in Mine City—the site of the Shuhodo limestone caves, which commemorated their 100th anniversary since opening—our factory has one of the largest cement manufacturing and limestone mining operations in Japan. We have increased our waste treatment capacity by building an additional facility to treat waste plastic. We seek to become an “eco factory trusted by the community” by paying the utmost attention to environmental protection—as our plant and mine are located near residential areas—and by building and maintaining harmonious relations with the local community, participating in various local events and operating factory tours.

Masakazu Ikawa, Factory Manager

Kanda Cement Factory
Location: 7 Nagahama-machi, Kanda-cho, Miyako-gun, Fukuoka Prefecture
Start of operations: 1964
Site area: 209,000 m² (excluding mines)
No. of employees: 66
Main products: Cement

Kitakyushu’s Kanda is a major industrial area and the site of cement, automotive and other factories thanks to its excellent logistics infrastructure (land, sea and air). Since the factory’s founding nearly 50 years ago, we have adapted ourselves to the times and gone through constant development, and as a waste treatment facility, we now play a central role in the recycling-based society. We will mobilize the wisdom of all employees and vigorously push ahead to create a factory that is environment and people-friendly.

Mamoru Matsuzuka, Factory Manager

UBE-MC Hydrogen Peroxide, Ltd.
Location: 2579-78 Fujimagari, Ube City, Yamaguchi Prefecture
Start of operations: 1993
Site area: 13,000 m²
No. of employees: 34
Main products: Hydrogen peroxide

Our factory produces hydrogen peroxide, a very environmentally clean chemical that is the product of the decomposition of water and oxygen alone. We are working to abide by relevant laws and regulations and to achieve a zero-accident workplace based on the fundamental principle “safety takes precedence over all business.” By leveraging environmental management systems, we are proactively preserving and improving the environment and reducing our environmental impact.

Eiji Washimoto, Factory Manager

Sakai Factory
Location: 3-1 Chikko Shimmachi, Nishiki-ku, Sakai City, Osaka
Start of operations: 1967
Site area: 463,000 m²
No. of employees: 283
Main products: Caprolactam, ammonia, liquefied carbon dioxide, electrolytes, separation membranes, polyamide products, recycled compounds

Our factory is located in Sakai City, which, as an environment model city, has announced the Cool City Proclamation. The factory manufactures chemical products and specialty materials and is taking proactive steps to conserve energy and resources. Our goal is to create a facility that contributes to the local community through dialogue with local residents and cooperation with the government. In 2009, we will again sponsor the Sakai/Semboku District Region Dialogue, and we look forward to your participation.

Kenji Yamagata, Factory Manager

UBE Film, Ltd.
Location: 1020 Onoda, Sanyo-Onoda City, Yamaguchi Prefecture
Start of operations: 1964
Site area: 50,000 m²
No. of employees: 243
Main products: Wrapping film for home use, wrapping film for commercial use

We are committed to being a company that is able to contribute to society by providing a wide variety of films that use polyethylene resin as the main ingredient. All employees will work hard to ensure environmental management, safety and quality, and we will meet the demands of customers by manufacturing human- and environment-friendly wrapping film for home use and new Polywrap, as well as various polyolefin film products that provide functions essential for industrial use.

Hiroshi Nakamura, President

UBE Group CSR Report 2009
To protect the precious global environment for future generations, we are also striving to reduce energy consumption and waste generation. Owing to such efforts as the promotion of recycling at the Gillu Factory, we were able to lower emissions from industrial landfill waste to zero.

Shunichiro Maniwa, President

Ube-Netto Kasei Co., Ltd.

Gillu Factory
Location: 2-1-1 Yatabe-Nishii, Gillu City, Gillu Prefecture
Start of operations: 1996
No. of employees: 195
Site area: 154,900 m²
Main products: Material for optical communication cables, high-purity silica particles, flexible copper-clad laminate, FRP products

Fukushima Factory
Location: 1-10 Yoshijima, Fukushima, Fukushima-cho, Koriyama City, Fukushima Prefecture
Start of operations: 1996
Site area: 30,000 m²
No. of employees: 57
Main products: Corrugated fiber for hygienic materials, high-strength polypropylene fiber, reinforcement fiber for concrete, material for optical communication cables

As a part of our mainstay phenol resin for electronic material, we develop and produce non-halogen-free heavy metal and flame-retardant biphenyl resin, which helps conserve the global environment. Based on our ISO 9001, ISO 14001, and OHSAS 18001 certified management systems, we proactively practice quality, environment, and occupational health & safety management. Our community contribution programs include sponsorship of the Yamaguchi Junior Soccer Tournament and the Ube Ekiden Relay Race.

Yoshiki Suzuki, President

Meiwa Plastic Industries, Ltd.

Ube Factory
Location: 1985 Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1948
No. of employees: 302
Site area: 432,000 m²
Main products: Magnesia chloride, other raw materials for refractory, magnesium-related chemical industry products, calcium-related chemical industry products

Chiba Factory
Location: B-2 Goi-Minami-Kaigan, Ichihara City, Chiba Prefecture
Start of operations: 1974
Site area: 50,000 m²
No. of employees: 105
Main products: Calcia, other ceramic products, calcium-related chemical industry products

As a company that manufactures and sells housing-related materials, we pursue harmony with nature, co-existence with the environment, and the manufacture of safe products. We provide comfort, safety and security for everyone by actively undertaking measures to preserve the global environment, while vigorously manufacturing products that garner the trust of people.

Nobuhiko Kataoka, President

Ube Board Co., Ltd.

Ube Aluminum Wheels, Ltd.
Location: 2575-62 Fujimagari, Ube City, Yamaguchi Prefecture
Start of operations: 1987
Site area: 110,000 m²
No. of employees: 243
Main products: Aluminum car wheels

We made a fresh start in July 2009 as an independent company specializing in the manufacture of aluminum wheels. Based on the utilization of our unique squeeze casting method—characterized by a high level of strength and toughness—we are able to reduce wheel weight, thus contributing to improved vehicle fuel consumption rates and reductions in exhaust gas. We will continue to undertake operations that place the highest priority on maintaining quality in three fundamental areas: environmental management, safety and products.

Takashi Miura, President

Ube Steel Co., Ltd.

Location: 1978-19 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1989
Site area: 102,000 m²
No. of employees: 233
Main products: Billets, castings

We produce billets and castings mainly from scrap metal. We also dispose of and treat waste plastics, medical waste, and other industrial wastes. Through our business, we aim to recycle resources and to achieve zero emissions. Based on ISO 9001, ISO 14001, OHSAS 18001 and other management systems, we have been engaged in company-wide activities in quality assurance, environmental management and safety control.

Motofumi Ishi, President

Ube Machinery Corporation, Ltd.

Location: 1980 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1942
No. of employees: 679
Site area: 270,000 m²
Main products: Die-casting machines, injection molding machines, extrusion presses, crushing machine, ceramic machine, transportation equipment, water screen equipment, bridge members, foodgauges, steel structures

Further evolving our product manufacturing capabilities that we have accumulated over many years, our die-casting machines, electric injection molding machines and crushing machines in particular have undergone technological innovation to achieve higher energy and space efficiencies and greater functionality. At the same time, we make every effort to live in harmony with the local community. We will strive to exist in harmony with the local community through these actions.

Kenichi Abe, President

Ube-Aluminum Mills, Ltd.

Location: 1989-1 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1996
Site area: 295,000 m² (including UEP)
No. of employees: 106
Main products: Exterior materials (cement siding board, slate board), interior materials

As one of the largest manufacturers of magnesium products in the world, we provide magnesium and related chemical products for refractory, magnesium-related materials, high-strength fiber-reinforced composites and structural composites. We will strive to ensure that our products remain competitive in the highly competitive global market.

Masahisa Matsumae, Senior Managing Director, Head of Manufacturing Headquarters

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

Location: Castellon, Spain
Start of operations: 1967
Site area: 295,000 m² (including UEP)
No. of employees: 259
Main products: Copolymerized nylon, ammonium sulfate and liquid fertilizers, polycrystalline, 1,5-pentanediol, 1,6-hexanediol

As UCE Group companies acquired ISO 14001 certification in January 2009 and the Regional Government’s Integrated Environmental Authorization. This authorization was a result of the Regional Government’s approval of the Group’s response to the Directive Concerning Integrated Pollution Prevention and Control (IPPC** Directive) issued by the EU Council. However, CO₂ emissions could not be lowered to standard levels set by the Spanish Government due to the Group’s inability to obtain a boiler that uses liquid waste as fuel. Operations using a new boiler will begin in 2009 with the aim of reducing CO₂ emissions.

Ricardo Lopez, CEO

*IPPC: Integrated Pollution Prevention and Control Directive

Thailand

Thai Caprolactam Public Co., Ltd.
Location: Rayong, Thailand
Start of operations: 1996
Site area: 192,000 m²
No. of employees: 411
Main products: Caprolactam, ammonium sulfate

In fiscal 2008, all three plants in UBE Group Thailand (TCL, UNT, TSL) maintained consistent operations. In 2009, we took steps to further strengthen our position as a manufacturing base in Asia by commissioning operation of the new nylon plant of 50kt/year production capacity. Moreover, with the construction of an R&D center, we are devoted to the promotion of academic endeavors throughout the region.

Charunya Phichikul, CEO

Ube Nylon (Thailand), Ltd.
Location: Rayong, Thailand
Start of operations: 1997
Site area: 23,000 m²
No. of employees: 93
Main products: Nylon 6 resin, nylon compound

Thai Synthetic Rubbers Co., Ltd.
Location: Rayong, Thailand
Start of operations: 1998
Site area: 40,000 m²
No. of employees: 89
Main products: Butadiene rubber

Spain

Ube Corporation Europe, S.A./Ube Chemical Europe, S.A.
Location: Castellon, Spain
Start of operations: 1967
Site area: 295,000 m² (including UEP)
No. of employees: 259
Main products: Copolymerized nylon, ammonium sulfate and liquid fertilizers, polycrystalline, 1,5-pentanediol, 1,6-hexanediol

Ube Engineering Plastics, S.A.
Location: Castellon, Spain
Start of operations: 2004
No. of employees: 40
Main products: Nylon 6 resin, caprolactamized nylon

As UCE Group companies acquired ISO 14001 certification in January 2009 and the Regional Government’s Integrated Environmental Authorization. This authorization was a result of the Regional Government’s approval of the Group’s response to the Directive Concerning Integrated Pollution Prevention and Control (IPPC** Directive) issued by the EU Council. However, CO₂ emissions could not be lowered to standard levels set by the Spanish Government due to the Group’s inability to obtain a boiler that uses liquid waste as fuel. Operations using a new boiler will begin in 2009 with the aim of reducing CO₂ emissions.

Ricardo Lopez, CEO

*IPPC: Integrated Pollution Prevention and Control Directive

UTE Group CSR Report 2009 www.ube-ind.co.jp/english
Third-Party Verification and Opinion

In July 2009, UBE received third-party verification of this CSR Report from the Responsible Care Verification Center. This was the fourth time we have had the CSR Report verified. We will further improve the quality and content of our future CSR Reports in reference to the feedback the Center provided us within their verification questionnaire and their written opinion regarding the verification results.

Objectives of Verification
The Responsible Care Verification Center verified the UBE Group CSR Report 2009, created by Ube Industries, Ltd. (hereinafter, “the CSR Report”), to give its opinion regarding the following items in its capacity as an expert in the chemical industry:
1) Rationality and accuracy of the method used to calculate and tabulate the performance indicators (numerical data)
2) Accuracy of the information other than numerical data provided in the CSR Report
3) Performance of Responsible Care (RC) activities
4) Characteristics of the CSR Report

Verification Procedures
- The Center staff visited the head office of Ube Industries, Ltd. and asked questions to check the rationale of the method the Company employed to compile numerical data reported from each of its sites (offices and plants) and to check the accuracy of information provided in the CSR Report. Employees in charge of relevant business operations and those in charge of creating the CSR Report answered the questions of the Center staff and presented and made explanations in regard to the documentation used.
- The Center staff also visited the Chiba Petrochemical Factory and asked questions to check the rationale of the method the sites employed to calculate the numerical data reported to the head office and the accuracy of the numerical data and other information provided in the CSR Report. Employees in charge of relevant business operations and those at the Factory in charge of preparing the CSR Report answered the questions of the Center staff and presented and made explanations concerning documentation used. The Center staff also checked the consistency of the items used to verify the material evidence submitted.
- The Center used their sampling method to verify the numerical data and other information contained in the CSR Report.

Opinions
1) Rationale of the method used to calculate and tabulate the performance indicators and accuracy of the numerical data
   • Both the head office and the Chiba Petrochemical Factory calculated and tabulated the performance indicators in a rational manner.
   • According to the results of the verification survey, the numerical data was calculated and tabulated in an accurate manner.
   • The Center recommends that revision procedures be specified in order to ensure that methods for revising green purchasing performance indicators at the head office and on site remain consistent.
2) Accuracy of information contained in the CSR Report
   • The information published in the CSR Report was accurate. The Center pointed out that some of the expressions used in the draft CSR Report were not appropriate or easy to understand, and corrections were thus made. As a result, with respect to the final CSR Report, there were no such serious problems.
3) Performance of the Responsible Care (RC) activities
   • The Center commends the UBE Group for the steady improvement it has made in such initiatives as reducing CO₂ emissions, airborne emissions of chemical substances, the volume of final disposal industrial waste and the amount of waste recycled.
   • The Center recognizes the efforts made by the Chiba Petrochemical Factory to actively send personnel outside to promote dialogue with the local community as well as its efforts to upgrade the suppression of butadiene emissions.
4) Characteristics of the CSR Report
   • The Company aims to make its CSR Report easy for readers to understand by including an Editorial Policy for this report within the Table of Contents
   • Verifying the effectiveness of universal design, the Company endeavors to employ easy-to-read formats and designs that take the reader into account.
Third-Party Comments from an Expert

The UBE Group invited and obtained comments on its CSR report from an expert to provide more objectivity to the report and to identify new CSR challenges. We intend to incorporate comments received into our future CSR reporting and activities.

Anticipating a Proactive Approach to CSR that Is Not Only Consistent, but Upholds UBE’s "Corporate Essence"

Junko Nagata
Associate Professor, Graduate School for Creative Cities, Osaka City University

My initial impression was of the clear philosophy and commitment brought by the UBE Group’s CSR report in 2008 to the two initiatives: “A progressive approach and stronger stance against global warming” and “development of concepts that enhance social contribution activities.” The Group’s successful attainment of a 12% reduction in CO₂ emissions ahead of schedule—which is double the volume set by the Kyoto Protocol for emission reductions targets—is the result of comprehensive efforts based on a variety of approaches. Responding to global warming is most certainly a social responsibility that should be undertaken through a company’s business. Based on this, I would like to see the UBE Group maintain consistent measures, reflect on how they could make more improvements and demonstrate leadership with environmental management that only the UBE Group can accomplish. Moreover, I believe that it is very difficult for companies to enhance their social contribution activities given the state of the current economic environment. In addition to the Group’s CSR tours and other community-based initiatives, I have a keen interest in projects being undertaken to commemorate the 50th anniversary of the UBE Foundation as well as UBE’s educational- and cultural-oriented activities. I would also like UBE to continue to focus on the positive meaning behind the “essence” of its CSR from here onward. Although the Group has also attained numerous Responsible Care (RC) Code targets, which I believe is the fruition of its self-evaluation efforts and improvements, UBE must specify measures and responses to be taken during the next year in terms of items that have not yet been reached.

This year’s CSR report organizes messages targeted to each specific stakeholder based on the aim to coexist harmoniously with all stakeholders.

Response to the Third-Party Comments

We very much appreciate the valuable opinions and points provided by Ms. Nagata, all of which merit closer attention. We will closely consider her ideas concerning employee-related initiatives, including work-life balance. In fact, we have taken steps to establish systems pertaining to these issues in recent years. In spite of this, we are aware that more needs to be done in this area based on an examination of the degree to which these systems are being used. Consequently, UBE will steadily implement measures to ensure that these systems take root among employees from here onward. Likewise, we will endeavor to increase transparency through such measures as communicating individual and specific actions related to RC activities taken within UBE.

We have reflected on Ms. Nagata's opinions in relation to our response to global warming and our social contribution activities. In terms of the former, UBE took steps to bolster its initiatives by establishing a company-wide Global Warming Countermeasures Promotion Office on July 1, 2009. With regard to the latter, we will do our utmost to implement consistent social contribution measures despite the severe economic conditions that we are confronted with.

We will continue to carry out corporate activities based on the ideas provided by Ms. Nagata, while striving to further enhance the UBE Group’s CSR reports as a communication tool. Thus, we will continue to seek Ms. Nagata’s guidance.

Kazuhiko Okada
Director in Charge of Group CSR, Vice-President and Executive Officer
This report is printed with waterless soybean ink that contains no Volatile Organic Compounds (VOCs), in full consideration of the environment.