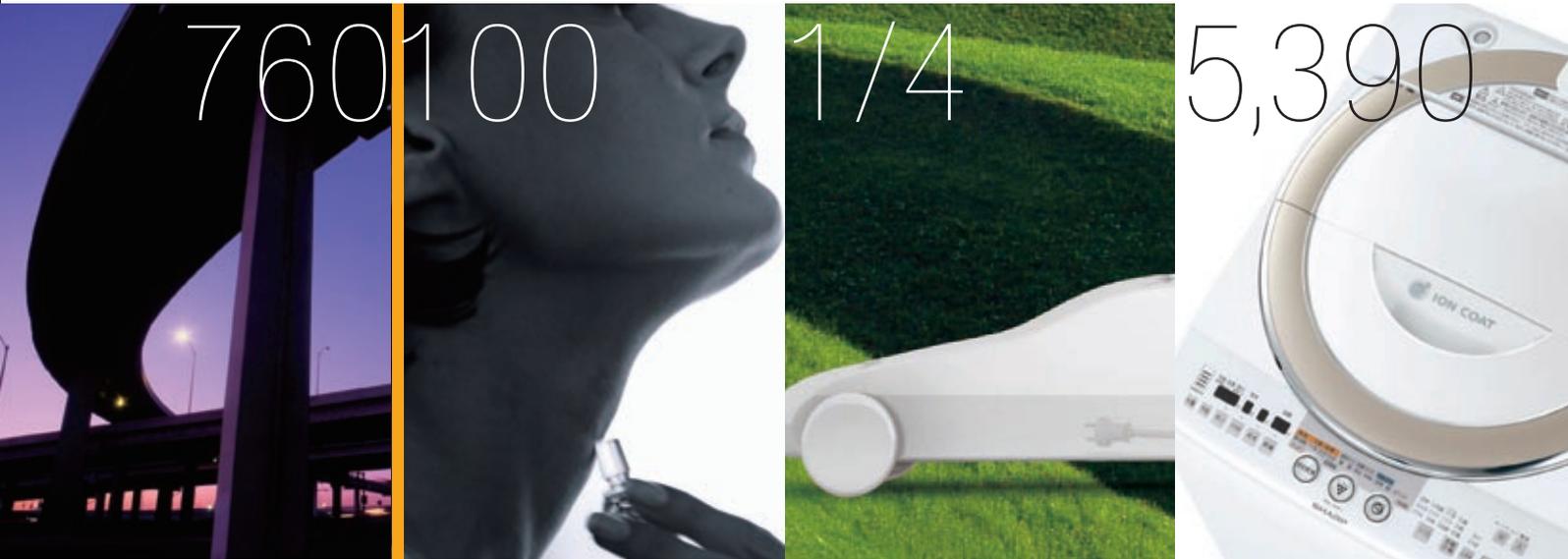


# UBE Group CSR Report 2010



Focusing on Harmonious Coexistence  
with All Stakeholders



**UBE INDUSTRIES, LTD.**

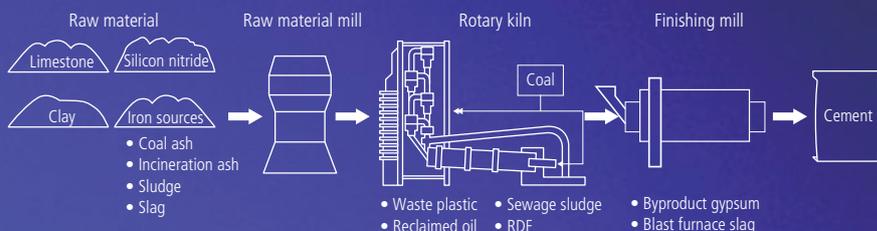
# *The Story of* Cement

As a primary ingredient of mortar and concrete, cement has a long history. One story of cement's origins is that it was first made in what is now Israel some 9,000 years ago. Moreover, as is evident with the mortar used to construct the pyramids and the concrete used in the ancient Roman aqueducts, cement played a key role in numerous historical monuments that remain with us today.

At present, cement is primarily used for concrete, which is ubiquitous and can be found in a diverse range of structures that include

bridges, dams, airports, seaports, roads, sewerage systems, buildings, and homes. As cement was a material essential to the development of social and urban infrastructure, the UBE Group began producing it in 1923. In the ensuing 87 years, we have supported the advance of cement production and products, and we have continued to contribute to improvements in social capital.

An important issue to consider is the unavoidable CO<sub>2</sub> emissions generated by the processes and energy consumption associated with



Every year the UBE Group recycles 3,030,000 tons of resource materials. This tonnage, utilized as raw materials for cement and energy alternatives, represents roughly an amount of waste and byproduct material equivalent to 760 times the weight of Tokyo Tower. Such recycling efforts demonstrate our enthusiasm in contributing to the promotion of a recycling-based society.

One characteristic of cement production is that there is no way around CO<sub>2</sub> emissions associated with the cracking process ( $\text{CaCO}_3 = \text{CaO} + \text{CO}_2$ ) of limestone, cement's main ingredient, and emissions from the consumption of energy required in actually producing the cement. To counter these emissions, however, UBE recycles waste resources into the production of cement to reduce the CO<sub>2</sub> emissions that would have been generated through the incineration process at waste processing facilities. Together with reducing CO<sub>2</sub> emissions throughout society, this recycling process extends the life of final treatment facilities and also conserves limestone, coal and other natural resources. Another major advantage is the reduction of the environmental impact that goes along with the operation and maintenance of final treatment facilities.

In addition to coal ash and waste plastic that have come to be used as the thermal and material recycle for cement production, recent technological advances have enabled the aggressive utilization of sewage sludge, household waste incineration ash and other lifestyle-related waste products. The development of such technology has realized the use of 419kg of waste and byproducts for every ton of cement produced.

cement production. With a focus on just this area, we believe one solution to the issue of CO<sub>2</sub> emissions reduction is resource recycling: namely, the utilization of numerous types of waste and byproducts as the thermal and material recycle required in the cement production process.

In 2005, the UBE Group developed one of the industry's largest high-chlorine bypass facilities, enabling the expanded use of incinerated household waste and other waste with a high chlorine content, without diminishing the cement quality. In 2011, the UBE Group plans to start

operations of a facility that transforms waste plastic into fuel, increasing the range of waste to be utilized.

It is no easy task to produce cement of uniform quality using diverse byproducts and waste as raw materials. To broaden the variety of acceptable waste and byproducts it can use, the UBE Group has made efforts to develop various processing technologies, striving to reduce CO<sub>2</sub> emissions by utilizing waste resources that can only be recycled by a cement factory.

# *The Story of* Marine Fragrance

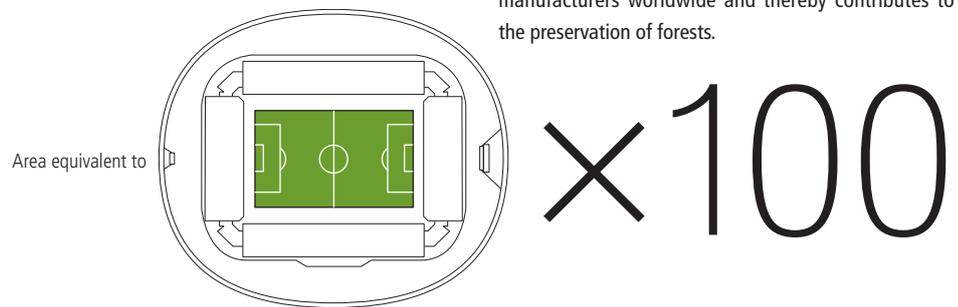
*HELIOFRESH* Marine Fragrance



The area of forest that is left untouched every year owing to the use of the UBE Group's *HELIOFRESH* Marine Fragrance is equal to the size of 100 soccer stadiums.

Previously, marine fragrance was produced from the oil extracted from the roots of logged sassafras trees, which is a member of the laurel family. Approximately one million sassafras trees are required to manufacture 800 tons of marine fragrance. Furthermore, once a sassafras tree is cut down, it will take 30 years for it to grow back.

The UBE Group is the world's first company to successfully synthesize *HELIOFRESH* Marine Fragrance entirely from chemical compounds, using absolutely no natural ingredients. Currently, the Group supplies this product to numerous major toiletries and fragrance manufacturers worldwide and thereby contributes to the preservation of forests.



A marine fragrance that is notable for its refreshing melon and watermelon accents, *HELIOFRESH* Marine Fragrance has been synthesized entirely from chemical compounds.

Prior to the introduction of *HELIOFRESH* Marine Fragrance, this type of scent was produced by using the sassafras tree, a member of the laurel family that is indigenous to North America. Sassafras trees were used by Native American peoples in ancient times as material for making dugout canoes, but they are now used to produce such non-alcoholic, carbonated beverages as root beer.

However, since it has become trendy to use marine fragrance in perfumes and other products, sassafras forests have become depleted in order to meet increasing demand, thus causing deforestation to reach serious proportions.

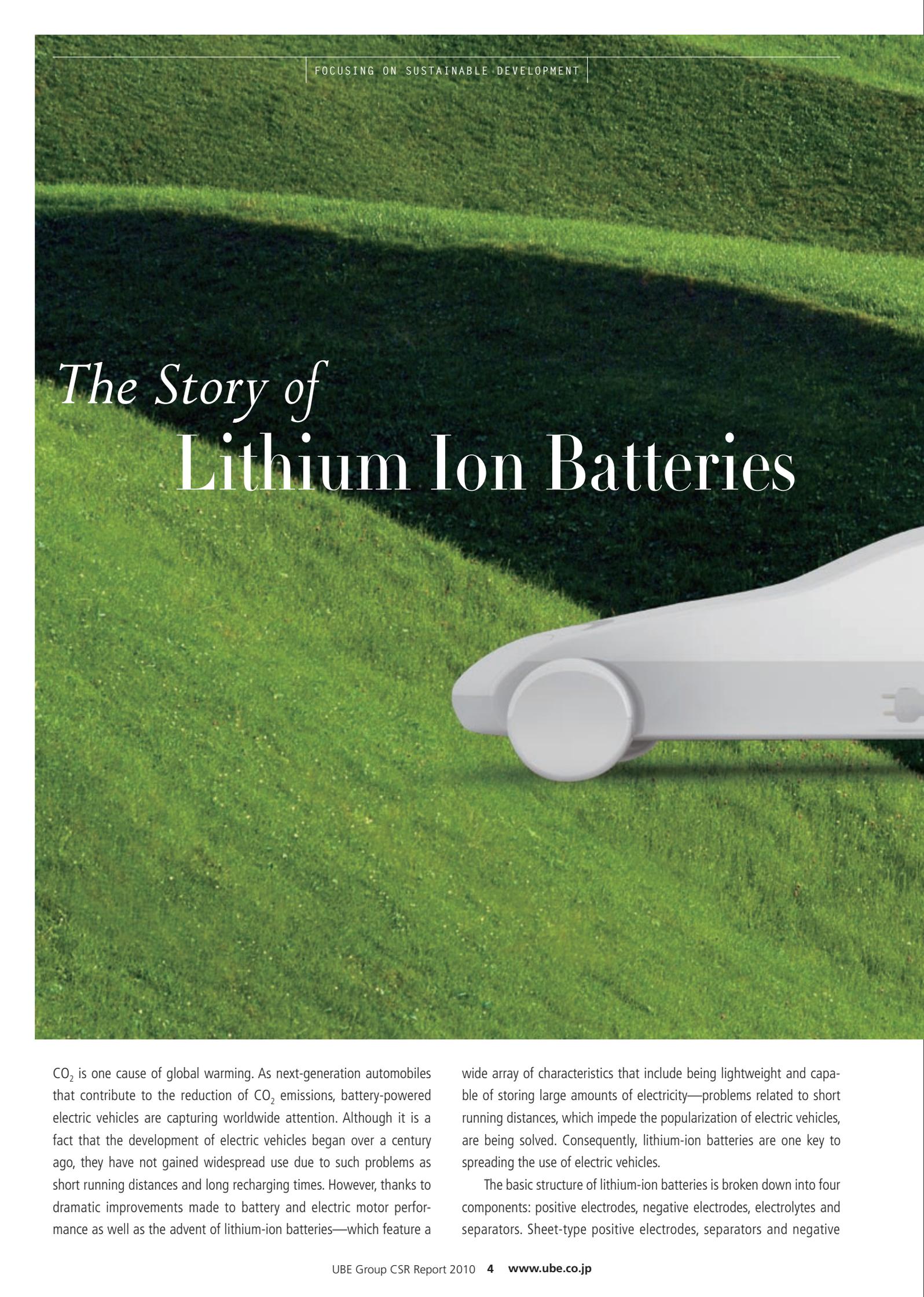
Forests play an important role in absorbing CO<sub>2</sub> from the atmosphere through photosynthesis, storing carbon as they grow. In other words, deforestation impedes the absorption and storage of CO<sub>2</sub>. Consequently, it cannot be overstated that deforestation accelerates global warming. In addition, depleted forests can no longer act as watersheds, so natural disasters such as floods and landslides can occur. For this reason, the key producing regions of sassafras trees

today (Brazil, Vietnam and Cambodia) have strengthened regulations to restrict logging or have banned such activities in order to preserve the environment and prevent flood damage.

The UBE Group developed *HELIOFRESH* Marine Fragrance in 2003 entirely from chemical compounds—using no botanical components—as a means of curbing such deforestation and maintaining a stable supply of marine fragrance. *HELIOFRESH* Marine Fragrance is synthesized only from existing chemical substances in a process that is both short and efficient. As a result, UBE is able to reduce raw material-related costs by two-thirds compared with methods that use natural ingredients.

The environment-friendly product *HELIOFRESH* Marine Fragrance, which is recognized for its high level of purity and quality, is currently being used in a wide array of cosmetics and perfumes worldwide. By ensuring a stable supply of *HELIOFRESH* Marine Fragrance through its ability to manufacture of 800 tons per year to keep pace with global demand, the UBE Group is playing an important role in preserving forest resources.

The Group will continue working to achieve a sustainable society by providing an even greater number of customers with such environment-friendly products as *HELIOFRESH* Marine Fragrance.

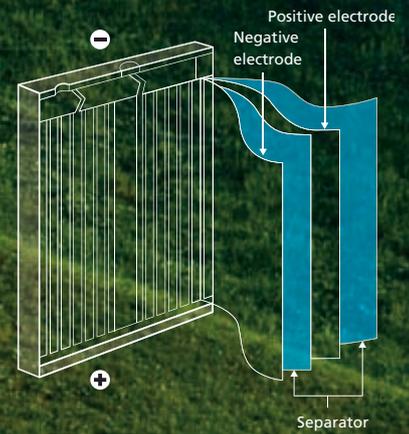
The background of the page is a vibrant green grassy hillside. In the lower right corner, a stylized white electric car is shown from a side profile, driving towards the left. The car is minimalist, with a large circular wheel and a charging port symbol on its side. The overall scene is bright and clean, symbolizing sustainable transportation.

# *The Story of* Lithium Ion Batteries

CO<sub>2</sub> is one cause of global warming. As next-generation automobiles that contribute to the reduction of CO<sub>2</sub> emissions, battery-powered electric vehicles are capturing worldwide attention. Although it is a fact that the development of electric vehicles began over a century ago, they have not gained widespread use due to such problems as short running distances and long recharging times. However, thanks to dramatic improvements made to battery and electric motor performance as well as the advent of lithium-ion batteries—which feature a

wide array of characteristics that include being lightweight and capable of storing large amounts of electricity—problems related to short running distances, which impede the popularization of electric vehicles, are being solved. Consequently, lithium-ion batteries are one key to spreading the use of electric vehicles.

The basic structure of lithium-ion batteries is broken down into four components: positive electrodes, negative electrodes, electrolytes and separators. Sheet-type positive electrodes, separators and negative



× 1/4

Because electric vehicles are powered by electric motors rather than gasoline engines, they emit absolutely no CO<sub>2</sub> or other gasses when being driven. However, by calculating the amount of CO<sub>2</sub> produced at the power stations that supply the electricity used by such vehicles, electric vehicles do, in fact, produce CO<sub>2</sub>.

It is estimated that the total amount of CO<sub>2</sub> emitted by electric vehicles is approximately one quarter\* of that produced by gasoline-powered automobiles. Moreover, it is anticipated that the use of electric vehicles will decrease the level of dependence on petroleum-based energy and significantly reduce the total amount of CO<sub>2</sub> emissions, compared with gasoline-powered automobiles, by obtaining electricity from such renewable energy sources as nuclear and solar power. It is also possible that the power load will be equalized by recharging electric vehicles at night.

According to the Ministry of Land, Infrastructure, Transport and Tourism, approximately 10% of CO<sub>2</sub> emissions in Japan during fiscal 2007 were produced by private automobiles. If all automobiles in Japan were converted into electric vehicles, it would be possible to reduce CO<sub>2</sub> by about 7.5% compared with fiscal 2007.

\* Japan Hydrogen & Fuel Cell Demonstration Project (JHFC): A Comparison of the amount of CO<sub>2</sub> emitted when driving a distance of one kilometer based on electricity derived from average energy sources available in Japan.

electrodes are layered multiple times in this order, and the entire unit is permeated with electrolytes. During electrical discharge, electrons are produced by positioning lithium ions to face away from negative electrodes and toward positive electrodes. During recharging, lithium ions are placed in the opposite position to collect electricity.

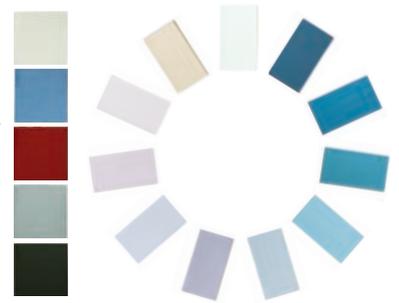
Among the components that compose lithium-ion batteries, the UBE Group manufactures Functional Electrolytes and UPORE separators. Used in wide array of products including mobile phones, laptop

computers and digital cameras, PURELYTE and UPORE help to make information devices smaller, lighter and longer lasting, while increasing their performance. By utilizing technology developed by UBE, these products contribute to the realization of comfortable and more practical electric vehicles. As a result of these innovations, the age in which clean energy becomes effective in preserving the global environment is finally arriving. The UBE Group is helping to prevent global warming by providing materials indispensable to the production of lithium-ion batteries.



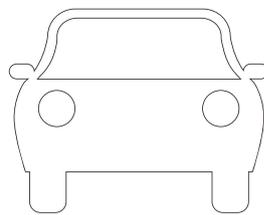


Waste plastic



Color tone variation of recycled plastic

The use of recycled plastic not only allows natural resources to be used more effectively, but it also reduces the amount of CO<sub>2</sub> emitted. Although 1.39 tons of CO<sub>2</sub> are emitted per 1 ton of virgin plastic (polypropylene) produced, only 0.35 tons of CO<sub>2</sub> is emitted per 1 ton of recycled plastic manufactured from waste plastic (achieved in fiscal 2009). The amount reduced, 1.04 tons, is roughly the equivalent to the volume of CO<sub>2</sub> produced by a gasoline-powered automobile driving 5,390km (the amount of CO<sub>2</sub> emitted per one kilometer driven by a gasoline-powered automobile equals 193g-CO<sub>2</sub>/km).



Conversion: 193g-CO<sub>2</sub>/km per automobile

× 5,390 km

Plastic is used every facet of daily life, including household electronics, automobiles and consumer goods. Although simply referred to as "plastic," this petroleum-based material comes in many different varieties, including nylon, polyethylene, polypropylene and ABS. In the past, most discarded plastic was dealt with as industrial waste. But with increasing environmental awareness and progress made in chemical technologies, the recycling of plastic is currently gaining momentum.

However, there are still difficulties associated with waste plastic recycling. Since combining waste plastic that is tinted with various colors, has an uneven surface coating or contains minuscule amounts of foreign substances is problematic, the use of such plastic has been limited only to black tints. In order to address such problems, the UBE Group successfully developed technology in 2002 that controls light permeability to allow waste plastic to be recolored in different tints as needed and make uneven surface coating much less visible. Recycled waste plastic produced by UBE Group technologies features superior strength, heat and light resistance, is easy to process and is able to be

colored in lighter shades. Thanks to these qualities, the applications of recycled waste plastic have expanded to include such visible exterior components as washing machine stands, refrigerator doors, automobile consoles and office chairs.

According to the developer of the original technology, *UBE-COMPOSITE*, a color-adjusting recycle compound that can change the color tint of waste plastics: "Nothing makes me happier than to see plastic that would otherwise be processed as garbage once again be put to use in society. Given that it is a new entrant in the recycled plastics business, the Group is developing innovative methods to ensure a stable amount of waste-plastic resources. However, it is through our original technologies that we are gaining customer trust. I would like to further reduce CO<sub>2</sub> emissions and support the realization of a recycling society through the use of this technology."

As a leading company in the plastic-material recycling industry, the UBE Group will actively develop applications for colorable recycled plastics in various fields.

# UBE Group CSR Report 2010 Contents

## Special Feature—

### Focusing on Sustainable Development:

#### The UBE Group's Approach to Global Environmental Issues

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#### 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, 13 years after the very first publication of the report, we have created the *UBE Group CSR Report 2010* as our sixth CSR report. In editing this CSR report, we have been committed to ensuring its accuracy and intelligibility. The 2010 edition adheres to the following policies:

##### 1. Enhance interactive communication

To clearly show how the public views the UBE Group and to identify new CSR-related issues for the Group, we included more opinions from third parties in sections such as "Guest Message" in this report. By doing this, we aim to realize interactive communication.

##### 2. Feature the UBE Group's products and technologies that contribute to sustainable growth

In order to realize harmonious coexistence with all stakeholders, the UBE Group considers environmental management to achieve sustainable growth on a global scale as being of utmost importance. As part of its approach, the Group introduces its unique business activities (products and technologies) that reduce environmental burden in the "Special Feature" section. In addition, specific examples of the Group's products and technologies that contribute to society are introduced in the "Information" section on page 48.

##### 3. 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 for all of our stakeholders, and we received certification from Color Universal Design Organization for the second consecutive year.

#### Scope of This Report

##### Period covered:

Fiscal 2009 (from April 1, 2009 to March 31, 2010)

(The report, however, does at times refer to activities conducted in fiscal 2010 and future plans.)

##### Companies covered:

- The UBE Group (140 companies)
  - Of which the following companies are covered in the reporting of major financial data (page 13):
    - Ube Industries, Ltd. and its consolidated companies (91)
      - Consolidated subsidiaries: 66
      - Equity-method affiliates: 24
    - Of which the following companies are covered in the reporting of environmental performance data:
      - Ube Industries, Ltd.
        - Three chemical factories (Chiba, Sakai and Ube)
        - Three cement factories (Ube, Isa, Kanda)
      - Other Group companies (11)
        - Ube Film, Ltd., Meiwa Plastic Industries, Ltd., Ube Ammonia Industry, Ltd., Ems-Ube, Ltd., UBE-MC Hydrogen Peroxide, Ltd., Ube-Nitto Kasei Co., Ltd., Ube Materials Industries, Ltd., Ube Board Co., Ltd., Ube Machinery Corporation, Ltd., Ube Steel Co., Ltd., Ube Aluminum Wheels, Ltd. (former Ube Aluminum Wheel Factory)

##### Definitions

- UBE: refers to Ube Industries, Ltd. (unconsolidated)
- The UBE Group: refers to the UBE Group companies, including Ube Industries, Ltd.

##### Areas covered:

- 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 (2005 to 2009)
- 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.



**Michio Takeshita**  
President and Group CEO, Representative Director

**Michio Takeshita Biography:** Since entering Ube Industries in 1973, Michio Takeshita has served in a variety of roles. Formerly the Executive Vice President of Thai Caprolactam Public Co., Ltd. (currently Thai Chemicals (Asia) Public Co., Ltd.), in 2001 he was appointed an executive officer of the Company. He has experience as head of the Manufacturing Integration Division of the Cement and Construction Materials segment and was also responsible for the Energy & Environment Division. In 2005 Mr. Takeshita became a Managing Executive Officer, and in 2008, he was appointed to the concurrent positions of Managing Director, Managing Executive Officer, General Manager of the Energy & Environment Division and General Manager of the Procurement & Logistics Division. Then in 2009, he became Senior Managing Executive Officer, Group CFO, and General Manager of the Corporate Planning & Administration Office, with responsibility for Ube Group Shared Service Center. In April 2010 Mr. Takeshita became the Company's 11th president.

With the formulation of its new medium-term management plan, "Stage Up 2012—New Challenges," the UBE Group will continue to promote efforts to "establish a platform for profitability that enables sustainable growth" and the "sustained improvement of its financial position." As another element of its basic strategies, UBE will "respond to and address global environmental issues" to reduce greenhouse gasses. Going a step further, however, the Group will move forward on the generation of technologies and products that benefit the environment. Under these three strategies, the Group intends to raise UBE brand value through various corporate activities both in and outside of Japan in its endeavors to satisfy stakeholder expectations.

### UBE Group CSR

One of the key management strategies of the previous medium-term management plan was to "strengthen CSR activities." What we did first was to construct a matrix of the scope of activities and our relationships to each stakeholder. In so doing, we were able to clarify the positioning of each CSR activity, and while getting a grasp of each activity's level of quality, we were able to further improve our CSR efforts.

As a result, people from both within and outside the UBE Group became more knowledgeable about our CSR activities, making it apparent that we had taken the understanding and awareness of CSR to the next level. In specific terms, for a company that undertakes CSR activities, this development is recognition of the kind of solid management needed to raise corporate value and realize sustainable growth. It is also acknowledgement of the fact that the UBE Group is advancing a wide range of activities, both in Japan and overseas.

The UBE Group has articulated its basic policy, systems, rules and code of conduct with regard to corporate governance, compliance, the environment, safety, quality, information disclosure, human rights and labor and social contributions. The results we have seen are increasingly high standards of quality

in all of these areas. Looking to the future, CSR will not simply comprise passive activities conducted to "meet the standards of laws" or because "that's what customers and society demand." Rather, what I would like to see is a further evolution toward a more mature level of CSR activities. These activities would be accomplished by aiming to be more autonomous and keeping in line with our founding philosophy of "living and prospering together with our neighbors" and our Group Vision.

### Global Warming Countermeasures

Our ability to establish such solid results in our efforts to strengthen CSR activities also enables us to apply our efforts in responding to and addressing global environmental issues, which is one of the basic strategies entailed in Stage Up 2012—New Challenges, our new medium-term management plan that began from fiscal 2010. Contributing to global environmental solutions is the very essence of CSR and represents a first step toward constructive activities by balancing economic and environmental concerns.

From the perspective of conserving and utilizing resources effectively, the UBE Group will make ongoing efforts to conserve resources and energy while maintaining its vitality as a company. On the other hand, we will also place emphasis on improving and generating technologies and products that benefit the environment. Our contributions to the environment have been substantial, and they include, for example, environment-friendly materials for batteries and materials for the automotive and other industries that provide significant weight reductions. But we intend to go further, enhancing products for next-generation developments in the energy field, products related to photovoltaic materials and eco-friendly fine chemicals, positioning these and other areas as driving forces for growth. We would like to quantify and assess environmental contributions from the perspective of UBE Group's Lifecycle Analysis (LCA), and we expect progress in this area to be steady.

### Social Contribution Activities

The UBE Group's social contribution activities are emblematic of its efforts to grow and develop sustainably. Because our stakeholders would not accept social contribution activities that would hinder management operations, and would be untenable in any case, the UBE Group will continue to make ever-more proactive endeavors to implement significant social contribution activities—endeavors to which it is best suited.

The UBE Group offers financial assistance for academic researchers. It also supports organizations that conduct social contribution activities, including the UBE Foundation, which is dedicated to assisting talented young researchers in the medical field, and the Watanabe Memorial Culture Association, an organization that backs a variety of social businesses and educational promotion activities. In the long history of the UBE Group, it could be said that such support represents the true value of our social contribution activities.

Other ongoing activities include our support, from fiscal 2008, of the well-received UBE Group Charity Concert by the Japan Philharmonic Orchestra in Ube, the comprehensive information center, "UBI-i-Plaza," and tours of local industrial facilities held by the UBE Group. They are all popular initiatives that deepen community relations and public understanding of the UBE Group, and should be developed even further. I would also definitely soon like to see employees utilize their expertise and visit nearby schools and other facilities to offer classes that appeal to local communities and gain their trust.

### The New Medium-Term Management Plan "Stage Up 2012—New Challenges"

With the conclusion of the three-year medium-term management plan, Stage Up 2009, commenced in fiscal 2007, we formulated a new medium-term management plan, Stage Up 2012—New Challenges. In this new plan, with its final year being fiscal 2012, we will continue the basic policy of the previous plan while also taking up the challenges of accomplishing even further growth.

As a subtitle under this new plan, "New Challenges" is a reference to three areas to which we will apply our efforts—specifically, "Challenge to Growth," "Challenge to Paradigm Shifts," and a "Re-challenge of the Numerical Targets of the Previous Medium-Term Management Plan."

Challenge to Paradigm Shifts is represented by the key areas of emerging markets and the environment. Together with the center of gravity of the markets in which we operate shifting to emerging economies, primarily in Asia, we are seeing demand for simple, reasonably priced, quality products. The business environment will certainly undergo a significant transformation because of the highly competitive emerging markets.

Within this environment, establishing a profit base where sustainable growth will be possible will require a strengthening and expansion of strategic

growth businesses in line with our business and R&D portfolio. In addition, it is my intention to tackle with a sense of urgency the issues of popularizing our products in high-demand emerging markets, raising our profile overseas by taking into account our business fundamentals, and restructuring businesses where demand is expected to stagnate.

### Appointment as President

Even now, the UBE Group that was "born and raised" in Ube, Japan is transforming itself into a company that is working toward global coexistence. However, our business is founded on the development of a fine tradition and corporate culture, and these attributes will not change. Living and prospering together with our neighbors is the founding philosophy of the UBE Group, and based on our Group Vision of "wings of technology and spirit of innovation, our DNA drives our global success," we embrace a frontier spirit and optimize infinite technology to coexist with the world to continue creating value for a new generation. The "technology" and "innovation" heralded in this vision, specifically, our unique technological capabilities and the spirit of challenge in which we welcome change, have continued to thrive for the past 113 years as our sense of shared values deeply rooted throughout the UBE Group. All employees should be proud of our traditions, and as a united group, take on issues based on our corporate philosophy and Group Vision. In this way I hope to see us mature into a group that becomes more prominent among all of our stakeholders.

August 2010

*Michio Takeshita.*

Michio Takeshita  
President and Group CEO, Representative Director

### Overview of the New Medium-Term Management Plan "Stage Up 2012—New Challenges"

#### Basic Strategies

- 1) Establish a platform for profitability that enables sustainable growth
- 2) Sustained improvement of financial position
- 3) Respond to and address global environmental issues

#### The Three "New Challenges"

- 1) Challenge to Growth
- 2) Challenge to Paradigm Shifts (emphasis on emerging markets and the environment)
- 3) Re-challenge of the Numerical Targets of the Previous Medium-Term Management Plan

#### Target Indicators for Fiscal 2015

- Operating income: ¥70.0 billion or higher
- Operating income ratio, return on assets: 8% or higher respectively

The new medium-term management plan is positioned as an action plan for achieving these targets. The numerical targets to be achieved by the final year of the plan are summarized to the right.

#### Management Targets

		Fiscal 2009 Result	Targets for Final Fiscal Year of Stage Up 2012
Financial Indicators	Net debt/equity ratio	1.4	Below 1.0
	Equity ratio	27.3%	30% or above
	Operating income ratio	5.0%	7.5% or above
Profit Indicators	Return on assets (ROA)	4.4%	7.5% or above
	Return on equity (ROE)	4.7%	12% or above

#### Key Figures for Profit/Loss Statement and Balance Sheet

		Fiscal 2009 Result	Targets for Final Fiscal Year of Stage Up 2012
(Billions of yen)			
	Net sales	549.5	670.0 or above
	Operating income	27.5	53.0 or above
	Business income	29.3	55.0 or above
	Net interest-bearing liabilities	244.0	Below 220.0
	Equity capital	178.8	225.0 or above



### Corporate Philosophy

The history of the UBE Group starts with the Okinoyama Coal Mine, established approximately 110 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 harmonious coexistence with all stakeholders throughout its long history—these elements make up the UBE Group’s core identity.

### 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 Group Vision, *“Wings of technology and spirit of innovation. That’s our DNA driving our global success.”* Embracing a frontier spirit and optimizing infinite technology, the UBE Group coexists with the world to continue creating values for the new generation, 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.

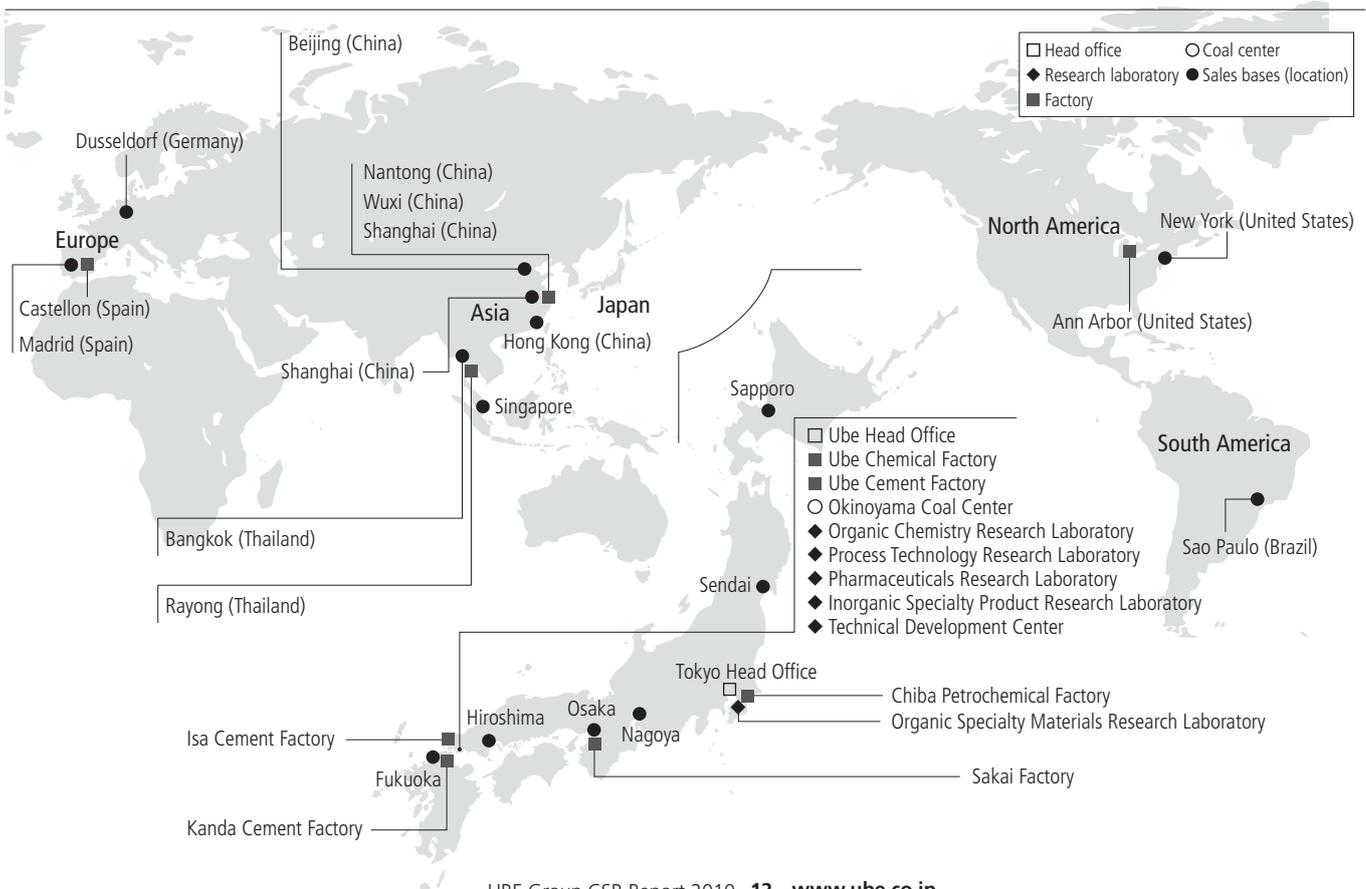
### Corporate Profile

Company Name: Ube Industries, Ltd.  
 Founded: June 1, 1897  
 Consolidated: March 10, 1942  
 President and Group CEO: Michio Takeshita  
 Capital: ¥58.4 billion (as of March 31, 2010)  
 No. of Employees: 11,108 (consolidated) 3,536 (unconsolidated)  
 (as of March 31, 2010)

### Business Profile

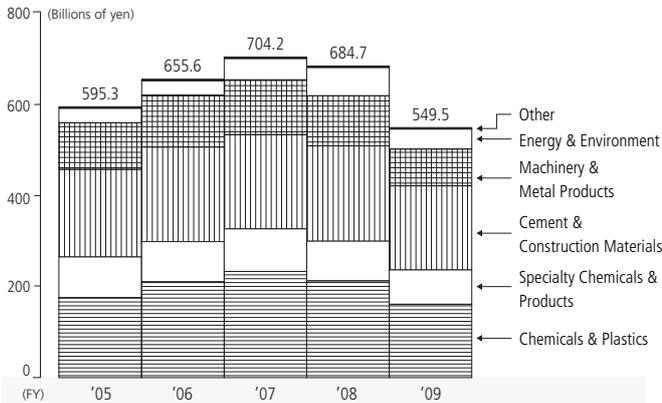
Business Segment Name	Main Products
Chemicals & Plastics	Nylon resins, caprolactam (a basic raw material for nylon), synthetic rubber, ammonia
Specialty Chemicals & Products	Specialty products such as battery materials and polyimide; fine chemicals
Pharmaceutical	Drug discovery; manufacturing of pharmaceutical active ingredients and intermediates
Cement & Construction Materials	Cement, ready-mixed concrete, construction materials, recycling of resources
Machinery & Metal Products	Molding machines, industrial machinery, aluminum wheels
Energy & Environment	Coal, electric power

### Business Bases in Japan and Overseas

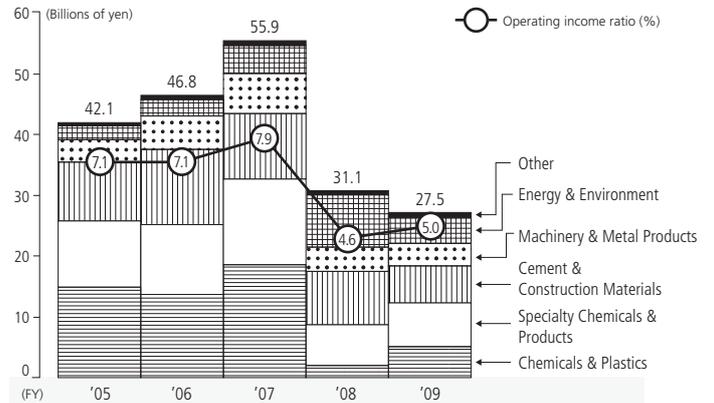


## Major Financial Data (Consolidated)

### Net Sales



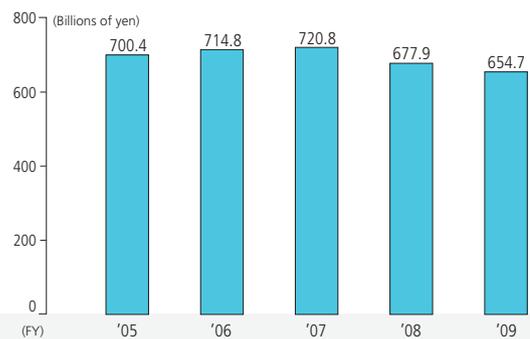
### Operating Income and Operating Income Ratio



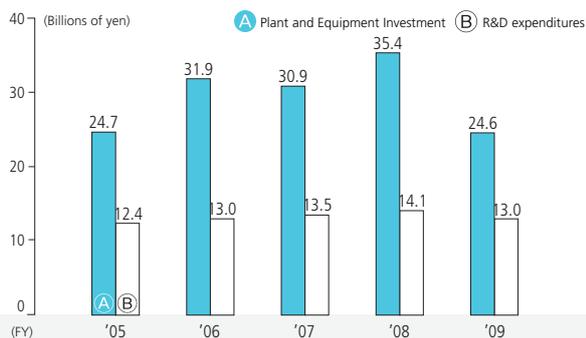
### Ordinary Income and Net Income



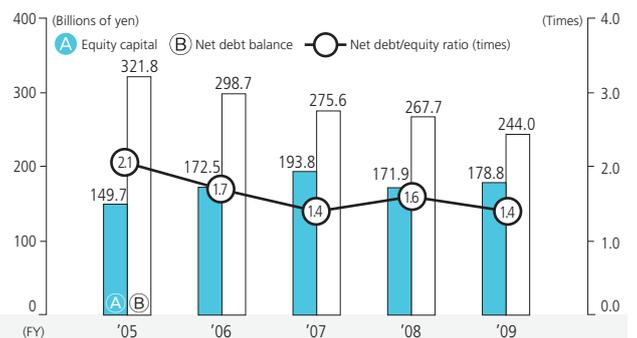
### Total Assets



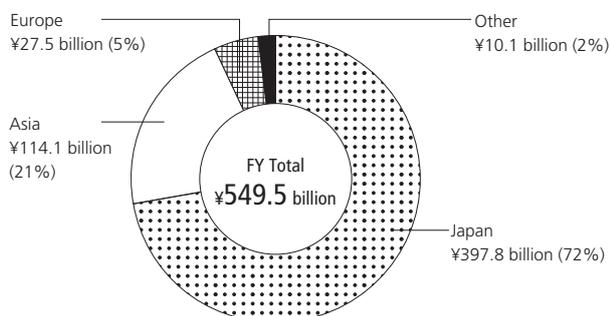
### Plant and Equipment Investment, and R&D Expenditures



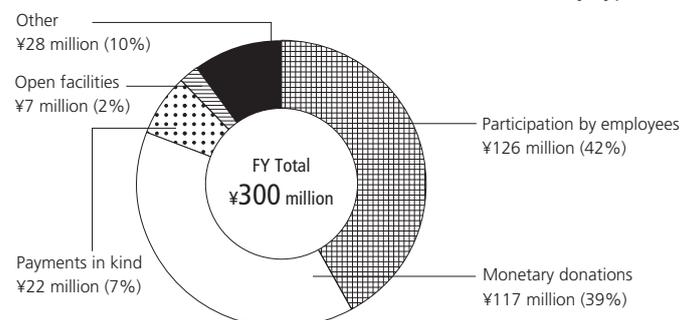
### Equity Capital, Net Debt and Net Debt/Equity Ratio (times)



### Net Sales by Region (FY 2009)



### Breakdown of Social Contribution Activities in FY 2009 (By Type)





Kazuhiko Okada  
Vice-President and Responsible for Group CSR,  
Representative Director

# 01

## 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.

### UBE Group Basic Policies for CSR

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

## Further Improving the System to Strengthen CSR Activities in Line with the Basic Policies for CSR

### CSR Promotion System

We have established the Group CSR Committee as a top-level decision-making body with regard to the UBE Group's Basic CSR Policies. It is composed of members of the Group Management Committee and is chaired by the Group's CEO (president). The Group CSR Committee makes decisions on and revises important matters related to the Group's Basic CSR Policies and CSR promotion activities, and it assesses the results of the Group's CSR-related activities.

Five specialized committees have been established within the Group CSR Committee, each of which engages in deliberating, reporting and revising specific action plans in accordance with policies and measures decided upon by the Group CSR Committee.

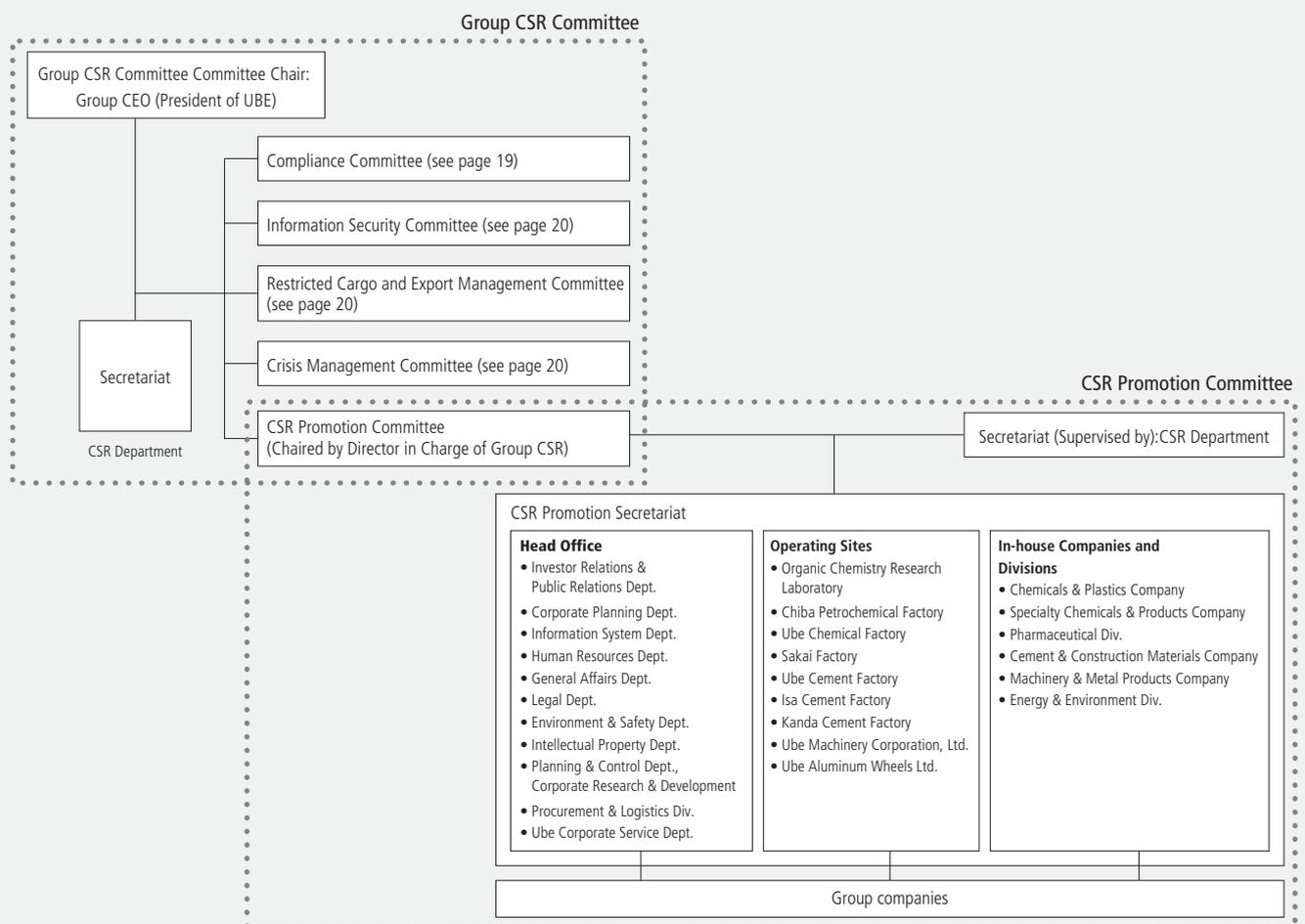
#### ● Group CSR Committee System

With the idea that CSR as an integral part of its management, the Group CSR Committee establishes the CSR matrix and implements CSR activities along with five affiliated committees and the Group Environment and Safety Committee. Through this system, the Group aims to harmoniously coexist with society by promoting fair corporate activities that deepen the level of trust between the Group and its numerous stakeholders, including shareholders, customers, suppliers, employees and local communities.

#### ● CSR Promotion Committee

The CSR Promotion Committee has been established as a subcommittee of the Group CSR Committee and is in charge of matters that fall outside the authority of other CSR-related committees, such as assessing the results of social contribution activities and formulating policies for drafting CSR reports.

### CSR Promotion System



### ● Significance of the UBE Group CSR Matrix

The CSR matrix clarifies the contents of CSR issues, broken down by stakeholder, that must be addressed by every UBE Group executive and employee based on the Group's CSR Mission.

In April 2010, certain sections of the CSR matrix were revised through deliberations undertaken by the Group CSR Committee.

The UBE Group thoroughly promotes Groupwide awareness of its CSR matrix, while carrying out all operations in accordance with the matrix, and monitors the progress of implementation every year.

### ● CSR Meetings

CSR meetings were held in six locations between January and March 2010 in order to undertake CSR activities in a manner that fully integrates all vectors within the UBE Group. Taking further steps to raise awareness and promote understanding among all employees is indispensable for actively implementing the Group's CSR activities. To that end, free-spirited discussions were held among 94 employees about the social expectations of the Group and the roles of both individuals and the UBE Group based on four themes: compliance, a comfortable workplace, helping to solve environmental problems and contributing to local communities. Looking ahead, we will make every effort to continue to hold such CSR meetings.



### Staff Message

Yuko Okita, Coal Business Unit Administration Section, Energy & Environment Division



#### Actions That Have Led to Increased CSR Awareness

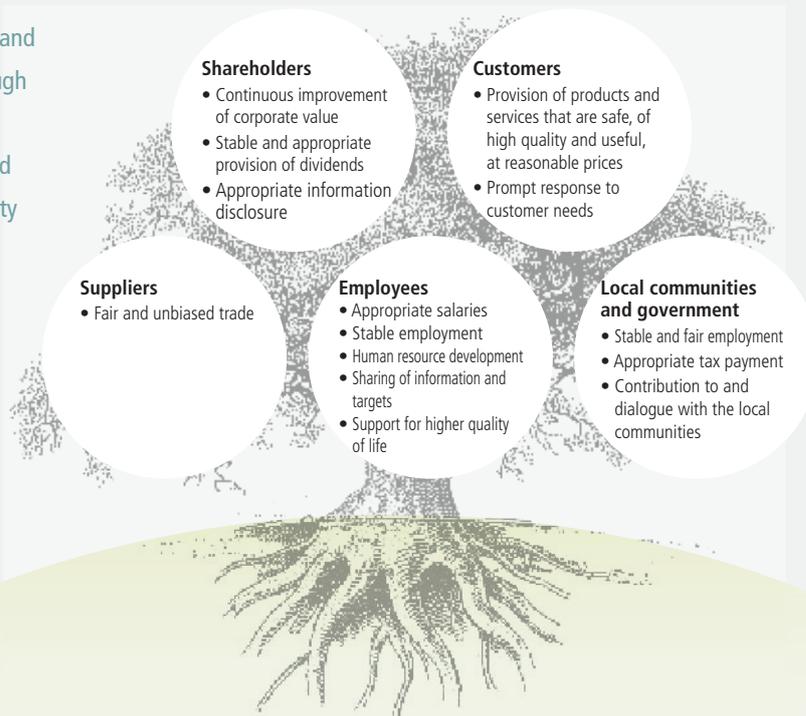
I believe that participating in this year's CSR meetings has made it possible to fully examine new ideas regarding CSR. I took part in discussions related to the themes, "helping to solve environmental problems" and "contributing to local communities." In terms of contributing to the local community, on a personal level I feel a particular affinity for the activities undertaken by UBE because I participated in organizing company tours as school events. In addition, employees from different divisions gathered to exchange various opinions about problems that have occurred at their workplaces. These discussions provided me with an opportunity to broaden my awareness of these issues. I hope we can hold more meetings like this in the future—meetings that are open for anyone to participate in and, whenever possible, that encourage an open and honest exchange of opinions.



A CSR meeting held at the Sakai Factory

### 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



UBE Group's CSR Matrix (Items for medium- and long-term initiatives broken down by stakeholder)

Basic Policies	Items for medium- and long-term initiatives		Groupwide organization	Primary department in charge
<b>Corporate governance and internal control</b> <ul style="list-style-type: none"> <li>To establish highly transparent corporate governance and an efficient and disciplined enforcement system</li> </ul>	Shareholder	<ul style="list-style-type: none"> <li>Enhancement of corporate governance and internal control</li> <li>Stable and appropriate provision of dividends</li> <li>Improvement of financial structure</li> </ul>	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., Accounting Dept. and General Affairs Dept.
	Customer	<ul style="list-style-type: none"> <li>Assurance of fair trade and competition</li> <li>Ensure ongoing business operations by formulating a business continuity plan (BCP)</li> </ul>		
	Supplier	<ul style="list-style-type: none"> <li>Fair and unbiased purchasing</li> </ul>		
	Employee	<ul style="list-style-type: none"> <li>Awareness of management policies</li> <li>Better understanding of CSR activities</li> <li>Business performance based on assigned roles</li> <li>Cultivate a sense that employees have a stake in management operations (through stock options, etc.)</li> </ul>		
	Local community, society and government	<ul style="list-style-type: none"> <li>Appropriate tax payments</li> <li>Maintain an appropriate relationship of trust with government agencies and other bodies</li> </ul>		
<b>Compliance</b> <ul style="list-style-type: none"> <li>To comply with corporate ethics and social norms without fail</li> <li>To comply with laws, regulations and contractual obligations</li> <li>To eliminate the presence of antisocial elements</li> </ul>	Shareholder	<ul style="list-style-type: none"> <li>Prevention of insider trading</li> <li>Appropriate disclosure of negative information</li> </ul>	Group CSR Committee, Compliance Committee, and Restricted Cargo and Export Committee	CSR Dept., Legal Dept., Corporate Planning Dept. and Intellectual Property Dept.
	Customer	<ul style="list-style-type: none"> <li>Compliance with related laws and regulations, including the Antimonopoly Act</li> <li>Strict confidentiality of customer information, etc.</li> </ul>		
	Supplier	<ul style="list-style-type: none"> <li>Respect for intellectual property</li> <li>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</li> </ul>		
	Employee	<ul style="list-style-type: none"> <li>Promote understanding and awareness (including overseas subsidiaries) of the Action Guidelines for Business Conduct, etc., thorough compliance education and improvement of compliance-related systems (reporting, consultations, etc.)</li> </ul>		
	Local community, society and government	<ul style="list-style-type: none"> <li>Compliance with related national laws, regulations and ordinances, more stringent prefectural standards, and other agreements</li> </ul>		
<b>Environment, safety, and quality</b> <ul style="list-style-type: none"> <li>To conduct business activities in consideration of the environment</li> <li>To provide environmental information</li> <li>To manufacture and provide safe, high-quality products and services in a safe manner using safe technologies</li> </ul>	Shareholder	<ul style="list-style-type: none"> <li>Promoting better understanding of environment-, safety-, and quality-oriented management</li> </ul>	Group Environment and Safety Committee, Group Product Safety Committee, and Crisis Management Committee	Environment & Safety Dept., REACH Promotion Office, Global Warming Countermeasures Promotion Office and General Affairs Dept.
	Customer	<ul style="list-style-type: none"> <li>Development and provision of products and services that help reduce environmental impact</li> <li>Provision of safe, high-quality products and services</li> <li>Compliance with related laws and regulations</li> </ul>		
	Supplier	<ul style="list-style-type: none"> <li>Implementation of more measures for the reduction of environmental impact</li> <li>Clarification of safety and quality requirements</li> <li>Promotion of green purchasing</li> </ul>		
	Employee	<ul style="list-style-type: none"> <li>Improved education and awareness concerning the environment, safety and health, quality, and energy conservation</li> <li>Creation and provision of a safe and comfortable workplace</li> </ul>		
	Local community, society and government	<ul style="list-style-type: none"> <li>Compliance with environment-, product-, and service-related laws and regulations</li> <li>Proactive measures to reduce environmental impact</li> <li>Ensure the safety and security of the local community</li> </ul>		
<b>Information disclosure and communication</b> <ul style="list-style-type: none"> <li>To disclose information to stakeholders appropriately and in a timely manner and expand communication channels with them</li> <li>To appropriately manage information</li> </ul>	Shareholder	<ul style="list-style-type: none"> <li>Disclosure of information about management status, CSR, and risks</li> <li>Appropriate information provision to investors and analysts</li> <li>Organization of a general meeting of shareholders in an open manner</li> </ul>	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	<ul style="list-style-type: none"> <li>Provision of appropriate information about products, services, and safety</li> <li>Protection of personal information</li> </ul>		
	Supplier	<ul style="list-style-type: none"> <li>Clear statement of procurement policies</li> <li>Promotion of communications</li> <li>Appropriate administration of confidential information</li> </ul>		
	Employee	<ul style="list-style-type: none"> <li>Promotion of in-house communications</li> <li>Disclosure of information about working conditions</li> <li>Management of information security and protection of privacy</li> <li>Promoting better understanding of the treatment of intellectual property rights</li> </ul>		
	Local community, society and government	<ul style="list-style-type: none"> <li>Promoting better communication with the local community and related organizations (through the UBE-i-Plaza and RC Regional Dialogue, etc.)</li> <li>Establishment of favorable relations with mass media companies</li> </ul>		
<b>Human rights and labor</b> <ul style="list-style-type: none"> <li>To respect the human rights of people who are affected by the Group's corporate activities</li> <li>To respect the human rights of employees, including those of partner companies</li> </ul>	Shareholder	<ul style="list-style-type: none"> <li>Promoting better understanding of and increased support for human rights</li> </ul>	Personnel Policy Committee	Human Resources Dept.
	Customer	<ul style="list-style-type: none"> <li>Consider people with disabilities when providing information about products and services</li> <li>Provision of advertisements that are not disagreeable to consumers</li> </ul>		
	Supplier	<ul style="list-style-type: none"> <li>Provision of equal trading opportunities</li> </ul>		
	Employee	<ul style="list-style-type: none"> <li>Improvement of the personnel system to enable a variety of employees to display their abilities</li> <li>Improved health and safety at workplaces and better health management by employees</li> <li>Sincere dialogues with employees and the labor unions</li> <li>Discontinuance of discriminatory employment practices and provision of equal employment opportunities</li> <li>Education on respect for human rights</li> </ul>		
	Local community, society and government	<ul style="list-style-type: none"> <li>Creation and assurance of employment</li> <li>Compliance with labor-related laws and regulations</li> <li>Discussion and dialogue toward the creation of a society with high respect for human rights</li> </ul>		
<b>Social contribution</b> <ul style="list-style-type: none"> <li>To conduct social contribution activities toward the creation of a sound and sustainable society</li> </ul>	Shareholder	<ul style="list-style-type: none"> <li>Promoting better understanding of and increased support for corporate social contribution activities</li> </ul>	Group CSR Committee and CSR Promotion Committee	CSR Dept., Ube Corporate Service Dept. and General Affairs Dept.
	Customer	<ul style="list-style-type: none"> <li>Promoting better understanding of corporate social contribution activities</li> </ul>		
	Supplier	<ul style="list-style-type: none"> <li>Promoting better understanding of corporate social contribution activities</li> </ul>		
	Employee	<ul style="list-style-type: none"> <li>Encouragement of and support for voluntary participation in social activities</li> </ul>		
	Local community, society and government	<ul style="list-style-type: none"> <li>Promotion of social contribution activities and improvement of the relevant system (through the UBE Foundation, etc.)</li> <li>Better understanding of corporate social contribution activities</li> </ul>		

## Establishing a Corporate Governance System to Further Increase the UBE Group's Corporate Value

### 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 seven 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. 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 22 executive officers, of whom four 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.

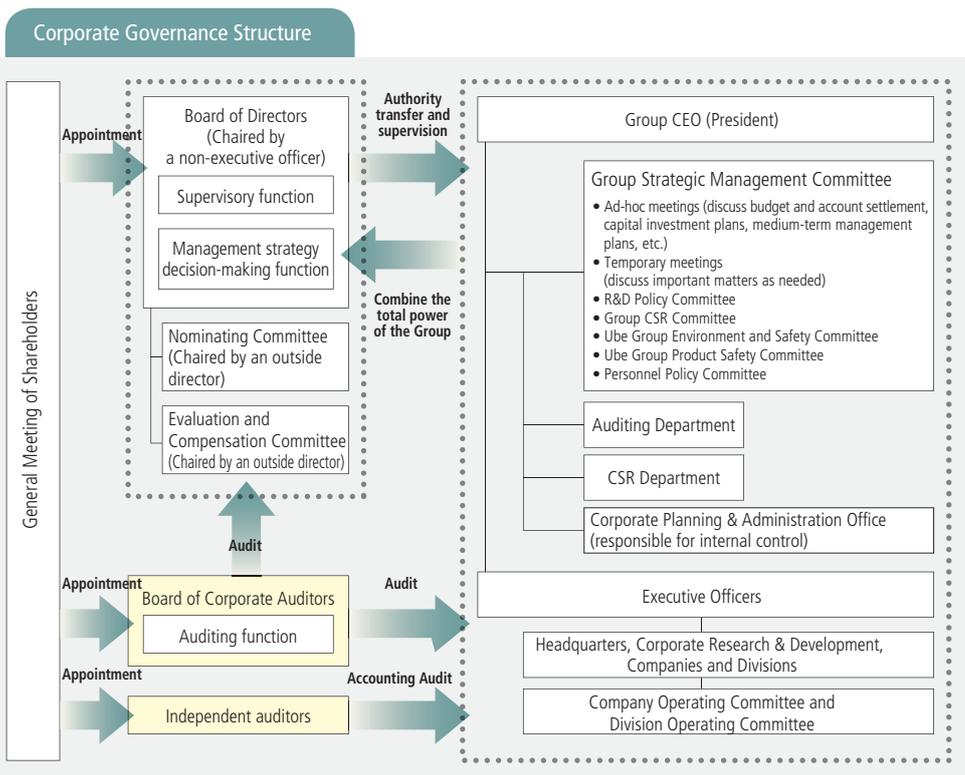
To realize flexible personnel matters with regard to directors and fully enforce a performance-related pay system, corporate director and executive officer terms of service last for one year.

#### ● 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. By checking the status of internal control and compliance with laws and regulations as well as adherence to manuals, UBE endeavors to identify potential risk across all areas of its business activities. Moreover, as a member of companywide risk management organizations such as the Compliance Committee, the head of the Auditing Department collaborates with each committee and is working to strengthen risk management systems.

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. In addition to receiving audit reports from the Group's corporate auditors, audit training sessions and exchanges of opinions are held regularly for the purpose of improving the quality of the audits.



### 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.

#### ● Company Operating Committee and Division Operating Committee

The Company Operating Committee and the Division Operating Committee are responsible for discussing and making decisions on key matters, such as business strategy, at their respective levels. They engage in these activities for Ube Industries and other UBE Group companies in accordance with the Group Management Guidelines and Company/Division Operating Committee rules that govern their operations.

# Compliance: A Prerequisite for Trusted Companies

## Measures to Ensure Effective Compliance

By carrying out their business activities, companies have an important role to play in creating and providing society with quality products and services. To fulfill this role, it is indispensable for companies to earn the trust of people and maintain a necessary presence as a member of society. Such basic actions are what the UBE Group defines as compliance. The UBE Group's efforts to maintain organizations that ensure compliance hinge on everyone's absolute adherence to general social rules—including laws and ordinances—and company regulations. The UBE Group also promotes the development of systems that ensure the effectiveness of its compliance-related measures, including the provision of numerous awareness-raising and training opportunities for company officers and employees.

### ● Revisions to Personal Action Guidelines

Personal Action Guidelines—booklets in which the behavioral norms that should be adhered to by company officers and employees—were revised in October 2009 and were distributed to all company officers and employees. In addition, an English-language version of the Personal Action Guidelines has been drafted for and distributed to employees of each overseas UBE Group company.

### ● Declaration and Measures Concerning the Elimination of Anti-Social Elements

Accepting the Policy to Prevent Companies from Being Harmed by Antisocial Elements, which was announced by the Japanese government, the UBE Group formulated the Basic Policy for Anti-Social Forces. Through this policy, the UBE Group declares to all concerned parties that it has absolutely no relationship (including business transactions) with antisocial elements, beginning with organized crime groups.

### ● Providing Compliance-Related Information

Taking advantage of the UBE Group's intranet, we are providing information on rules that must be followed by company officers and employees. Particularly with regard to specific legal regulations of such laws as the Antimonopoly Act and the Act against the Delay in Payment of Subcontract Proceeds, etc., we are working to broaden understanding of such laws by posting easy-to-comprehend explanations on the UBE Group intranet.

### ● Internal Reporting System

We are establishing mechanisms that facilitate the reporting of compliance-related problems directly to the divisions responsible for compliance and external contacts (lawyers) with the purpose of quickly identifying and correcting compliance-related violations.

### ● Enlightenment by e-Learning

The UBE Group holds annual online training sessions, covering wide-ranging compliance themes and geared toward all officers and employees.

### ● Compliance-Related Group Workshop

In conjunction with conducting stratified group education, which includes providing training for new employees and officers, the UBE Group implements group workshops at individual business offices.



Compliance training being held at the Ube Chemical Factory

### 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 ensure compliance throughout the UBE Group by supervising compliance-related activities.

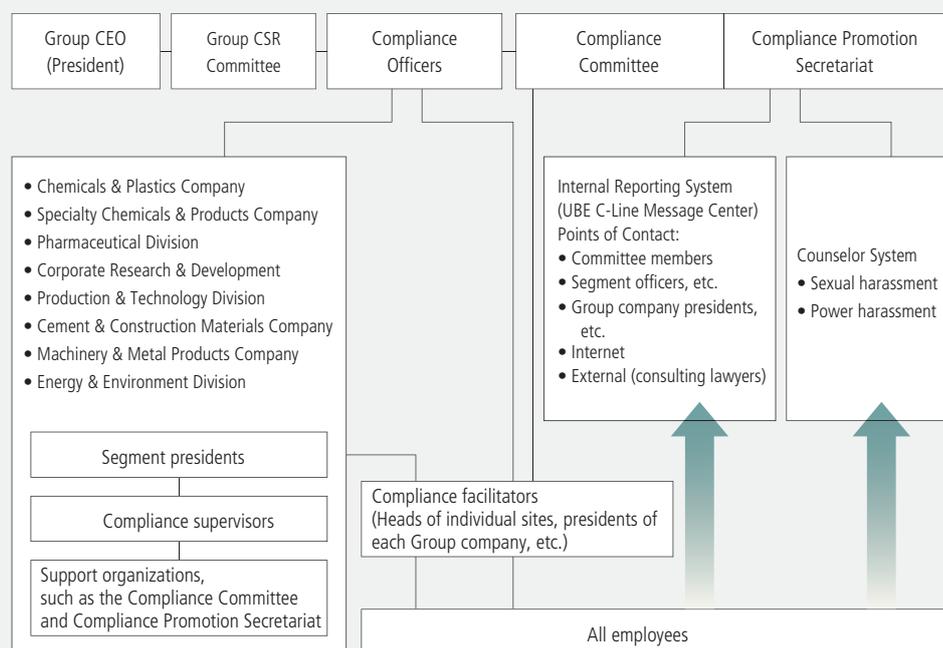
#### ● Compliance Committee

The Compliance Committee advises the Compliance Officers and deliberates on important compliance-related issues. To ensure transparency, a legal adviser (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



# Implementing Optimal Measures to Identify and Deal with Risks Associated with Business Operations

## Risk Management Systems

### ● Risk Management Systems

Companies conduct activities to make maximum profit, while dealing with a range of risks. The UBE Group is developing and reinforcing 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 Safety Committee. For the entire Group, these two committees formulate and actively implement policies concerning the environment and safety, and product safety, respectively. In addition, the Group has established the following committees to deal with individual risk categories.

### ● Information Security Committee

Due to the digitalization 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 the 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 either in Japan or 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.

## Formulation of BCP\*1

The UBE Group has formulated a business continuity plan (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 2009, the Tokyo Head Office, the Ube Head Office and the Chiba Petrochemical Factory participated in the second BCP field drill in anticipation of an earthquake occurring directly below the Tokyo metropolitan area. In addition, the Group formulated a BCP to prepare for possible Tonankai and Nankai megathrust earthquakes.

Furthermore, the Group also formulated a BCP to prepare for countermeasures against a new strain of influenza. When the World Health Organization raised the alert level to Phase Four in April 2009, the Group set up the "New Influenza Strain Crisis Management Taskforce" to promptly address the situation by considering the establishment of appropriate countermeasures to prevent the spread of the virus.



## Guest Message

Moriharu Hiragimoto, Vice President, Japan System Service Co., Ltd.



### A Natural Disaster Strikes when Least Expected!

Upon the outbreak of the Influenza A virus subtype H1N1 in 2009, some companies overreacted and ordered their employees' families who were living overseas to come back to Japan. Once the fatality rate of this new virus was found to be not high, however, such companies felt so relieved that they abandoned their countermeasures against the influenza A virus ("avian flu") that had been so thoroughly prepared.

The UBE Group, on the other hand, is appropriately preparing countermeasures under the leadership of its Crisis Management Taskforce both in Japan and overseas. The Group has remained alert, even after the end of the epidemic, and it continues to prepare for new types of infectious diseases. We should neither overrate nor underrate the importance of risk management.

## Glossary

\*1 BCP stands for business continuity plan—specifically, a plan 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.

# 02



## With Stakeholders

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.

### UBE Group Action Guidelines for Business Conduct

#### 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.

Revised July 2009

## Enhancing Transparency in Management to Become a Highly Reliable Company

### 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 capital markets and to implement transparent management in order to earn the trust of the market. To this end, we are disclosing information related to management strategy and business conditions 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 of improving direct communications with them. We are also dispatching a range of information through our website.

The following were the main IR activities conducted in fiscal 2009.

- 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: Three times)
- Small meetings held with the President (Two times)
- Factory visits (Five times, including overseas factories)
- Individual interviews with institutional investors and securities analysts  
(Approximately 270 per year)

We began publishing a semiannual financial report entitled, *Stockholder Communication*, for individual shareholders in fiscal 2007 to replace conventional business reports. We use this report 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.



A meeting to explain the new medium-term management plan

### ● Ordinary General Meeting of Shareholders

Aiming to make UBE's ordinary general meeting of shareholders more open and transparent, we send invitations to the meeting to shareholders rather early so that they have enough time to examine the agenda for the meeting. We also provide notification of the meeting via our website to increase the availability of relevant information. UBE holds its ordinary general meeting of shareholders in Ube City, Yamaguchi Prefecture, where the Company was founded, in late June of every year. More than 1,000 shareholders attend this meeting each year. After the meeting, we hold business briefings that help shareholders deepen their understanding of UBE's business, including a brief explanation by the president of what progress has been made in the medium-term management plan.

### ● Dividend Policy

UBE recognizes the payment of dividends to shareholders as an important responsibility to be fulfilled by the Company for its shareholders and makes it a fundamental policy to pay dividends at a level that is commensurate with its earnings results. At the same time, we must also bear in mind the need to maintain an adequate level of retained earnings in order to secure profits for shareholders on both a medium- and a long-term basis. We determine the amount of dividends to be paid to shareholders based on these overall considerations. Based on our current medium-term management plan, we will pursue a steady increase of the dividend payment amount in line with the improvement of our business performance, setting the target payout ratio at 20% to 25%. In fiscal 2009, we increased our dividend per share to four yen.

### ● Ratings

UBE regards "sustained improvement of its financial position" as one of its key management priorities, and the entire UBE Group has been making efforts to achieve this target. UBE's current rating by the Japan Credit Rating Agency, Ltd. is BBB+ ("stable"). We will push ahead to sustain the improvement of our financial position and further raise our rating.

### ● Socially Responsible Investment (SRI) Index Rating

UBE was again selected in 2008 by FTSE4Good Global Index, a leading SRI index. This index measures the performance of companies that meet globally recognized corporate responsibility standards in terms of environmental measures as well as employment, labor and human rights issues, and is thus important as an investment selection standard for investors deeply concerned with CSR. The FTSE Group, which provides this index, is jointly owned by the Financial Times, a British financial newspaper, and the London Stock Exchange and develops leading stock and securities-related indices.

In addition, Morningstar Japan K.K. selected UBE to be included in the "Morningstar Socially Responsible Investment Index" (MS-SRI) in 2009. As the first SRI index in Japan, the social character of companies is comprehensively rated in five areas (corporate governance/accountability, markets, employment, social contributions and the environment). Along with this rating, the names of companies that comprise this index are determined based on market liquidity. UBE was selected for the first time along 10 other companies for inclusion in the MS-SRI index in 2009.



# Raising Customer Satisfaction by Providing Safe, High-Quality Products and Product-Safety Information

## Working to Advance Product Safety and Quality Assurance

### ● The EU's REACH Regulation

Under the REACH Regulation,<sup>\*1</sup> all chemical products manufactured in or exported to the EU must be registered after undergoing hazard and risk assessments. In order to fulfill this obligation, the UBE Group is furthering its efforts to complete the registration processes primarily through its REACH Promotion Office.

In fiscal 2009, we completed early registration of certain products. In addition, we began the joint registration processes through supply chain and survey of identified uses as well as by jointly registering with other companies in the consortia.<sup>\*2</sup>

### ● Material Safety Data Sheet (MSDS)

To ensure the safe use of our chemical products, we have prepared MSDSs<sup>\*3</sup> for all of our products, and we disclose them on our website and through other media. 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 2009, we updated or newly created MSDSs, including GHS<sup>\*4</sup> and foreign language versions, for more than 200 products.



REACH registration dossier



MSDS website



GHS label



Material Safety Data Sheet



## Staff Message

Wichai Sirisuksuko, QA & QC Manager for Caprolactam Plant, UBE Chemicals (Asia) Public Co., Ltd.



### Maintaining a World-Class Level of Quality

For UBE (Thailand), developing sustainable, environment-friendly quality is an important goal—as it is, indeed, for all of the UBE Group companies. We have achieved certification for ISO9001, ISO14001, and OHSAS18001, and our primary focus now is on quality in order to meet customers' quality requirements and enhance their satisfaction. We are also actively developing and implementing global systems for the regulation of hazardous substances (RoHS, ELV and REACH) in all processes throughout the value chain. We are doing this so that we will be able to certify that our products do not contain banned substances introduced by a third party. Customers can therefore be confident that our products have minimized environmental impact, while maintaining a world-class level of quality.

## Glossary

\*1. REACH regulation: Regulation on chemical substances enforced in the EU in June 2007 (REACH stands for Registration, Evaluation, Authorisation and Restriction of Chemicals.)

\*2. Consortia: Formed voluntarily for a given substance through agreements between companies to obtain information required for the REACH registration and register the information obtained with the European Chemicals Agency

\*3. MSDS: Documentation containing the product name, physicochemical properties, safe uses, and hazard information, etc.

\*4. GHS: Globally Harmonized System of Classification and Labelling of Chemicals (system of classification based on globally shared rules developed within the United Nations) is used on MSDSs and labels. Labels and MSDSs are given distinctive pictograms.

Dealing with Suppliers in a Fair and Unbiased Manner Based on  
Free Competition

### ● Warning Labels

We attach container labels to products containing their hazard information and precautionary measures to be taken during the handling of such products. Moreover, we are promoting the full introduction of GHS labels and the Container Yellow Card labeling system.<sup>\*1</sup>

### ● Safety of Transportation

We are undertaking measures to prevent transportation accidents—by regularly checking whether a Yellow Card<sup>\*2</sup> is carried by our truck drivers and by conducting disaster drills—while improving the quality of our transportation operations.

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

To date, we have been actively gathering and communicating the hazard information of our chemical products primarily by taking part in the ICCA<sup>\*3</sup> HPV Program<sup>\*4</sup> and the Japan Challenge Program.<sup>\*5</sup>

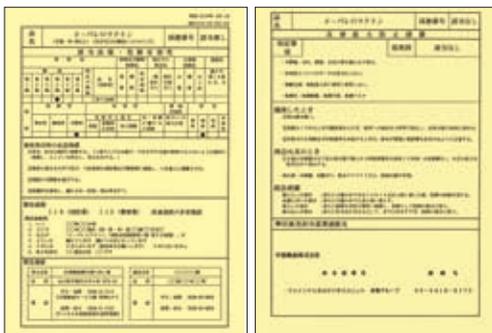
Through the JCIA, we also actively participate in and support the ICCA in its voluntary Long-range Research Initiative (LRI), which focuses on the effects of chemical substances on human health and the environment.

### ● Response to Green Procurement by Customers

Consistent efforts are made to reduce the use of environmentally 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.<sup>\*6</sup> As UBE itself is required to appropriately manage procured raw materials, it has established its own unique standards to promote the management of the substances contained in raw materials and parts procured.

### ● Quality Control Activities

In addition to its ISO quality management system, the UBE Group began undertaking quality and product safety audits in fiscal 2006; is strengthening the management of costs incurred in the case of product defects; and is further enhancing product safety as part of its compliance measures. We will raise customer satisfaction by preventing these quality and product liability issues.



Yellow card

## 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 within the Group, thereby ensuring that they understand and comply with the provisions.

### ● Approach to Green Purchasing

In line with the Law on Promoting Green Purchasing,<sup>\*7</sup> 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%, as it already stands at over 99%. In addition, soybean ink is used to print this CSR report on paper certified by the FSC.<sup>\*8</sup> Through these efforts, the UBE Group's green purchasing rate has improved to 62%.

### ● Measures Concerning CSR Procurement

The Group is scheduled to begin introducing the CSR Procurement Initiative in its three-year plan that began in fiscal 2010. The CSR Procurement Initiative establishes a set of criteria for deciding which suppliers to do business with based on the status of their CSR measures.

## 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.

## Glossary

\*1. Yellow Card (labeling system): A warning label that includes an emergency response guideline number and UN number, used in case of an accident under conditions where other information formats would be impractical because of mixed loading or small-order transportation

\*2. 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

\*3. ICCA: International Council of Chemical Associations

\*4. HPV Program: International safety management activities that gather information on and evaluate the hazards of High Production Volume Chemicals

\*5. 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

\*6. 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

\*7. 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

\*8. FSC: Forest Stewardship Council

## Supporting the Independent Efforts of Employees to Safeguard Their Health

### Developing a Comfortable Workplace and Undertaking Initiatives to Maintain Employee Health

#### ● Meet and Greet Campaign

The UBE Group comprehensively implements the Meet and Greet Campaign to encourage employees to exchange words of greeting and encouragement as a way of promoting better communications at the workplace. In fiscal 2009, the Meet and Greet Campaign was undertaken at 70 operating sites within the Group.

#### ● Conducting Lifesaving Courses

The Group has installed Automated External Defibrillator (AED) equipment in the event that someone goes into cardiac arrest at one of its operating sites. Consequently, the Group is conducting lifesaving courses that include training sessions on the use of AED equipment. In order to respond to these types of emergencies, we are ensuring that numerous employees participate in such life-saving courses.

#### ● Measures Concerning the Elderly

We implement health education to encourage both employed and retired elderly persons to live in a healthy manner. We also began offering exercise-related guidance in fiscal 2009 in order to prevent occupational accidents caused by employees who are in poor physical condition.

#### ● Mental Health Care

The UBE Group conducted mental health training sessions for new employees, mid-level non-managers, new managers and mid-level managers in fiscal 2009. In the same year, the Group conducted a survey of the mental health and stress level of employees. This initiative has been useful in increasing the mental health of employees.

#### ● Measures to Counter Lifestyle-Related Diseases

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. In fiscal 2009, we undertook a survey of the actual conditions at all of UBE's employee dormitories and canteens in accordance with our unified standards. In addition, 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.

#### ● Initiatives to Counter the New Strain of Influenza

One initiative of the New Influenza Strain Crisis Management Taskforce was to draft the *Influenza Reader*, which has been distributed to all UBE Group employees. Owing to these efforts, we have been able to shed light on this issue in order to formulate a response based on correct knowledge.



Influenza Reader



Meet and Greet Campaign



Lifesaving Courses



Exercise guidance for the elderly



### Staff Message

Takumi Manabe, Ube General Affairs Team, Administration Group, Planning & Control Dept., Corporate Research & Development



#### Participating in Regional Events

With the idea of getting in better shape, my fellow coworkers and I decided to take up jogging, walking and other exercises, which we all enjoy. In February 2010, 16 teams (totaling 112 employees) from 8 UBE Group business segments participated in the FM Kirara Cup Ube Long-Distance Relay Race. Participants ranged greatly in age, from entry-level employees to veterans. Although there are a variety of reasons why employees take part in this race, whether it is to improve one's health or try to surpass one's own personal record, such activities foster communication among employees, leading to a comfortable and open workplace. The Organic Chemistry Research Laboratory where I work fields eight teams every year, making this event even more exciting for us. As the special sponsor of the FM Kirara Cup Ube Long-Distance Relay Race, Meiwa Plastic Industries, Ltd. awards a prize for participating.



## Enhancing Human Resource Development by Promoting Employee Diversity and Helping Them Exercise Their Respective Abilities

### 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 knowledge to the next generation, as an integral aspect of the Company's human resource development program. The reemployment period is set at one year and can be extended each year. In fiscal 2009, we reemployed about 60% of those who retired that year.

#### ● 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 UBE Group hires mainly those who have expertise and knowledge in technological areas in which the Group's human resources are insufficient. After entering the Group, these mid-career workers exercise their abilities by using the work experience gained at former workplaces.

#### UBE's Employment Status

	2007	2008	2009
New graduates	131	148	131
New graduates deployed as generalists	46	53	56
Mid-career employees	107	100	6
Percentage of people with disabilities (annual average (%))	2.09	2.03	2.15

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.



Introductory education and field training for new employees

#### ● Employment of People with Disabilities

Actively undertaking measures to promote the employment of people with disabilities, the Group develops employment opportunities by leveraging relevant expertise accumulated in our special-purpose subsidiary, Libertas Ube, Ltd. (established in April 1991). In addition, Group companies located in the Ube district organized a network to support the employment of people with disabilities. In March 2009, Libertas Ube, Ltd. acquired the Certification of Good Standing as an Employer of Persons with Disabilities (Heartfelt Ribbon Mark). Libertas Ube has been highly commended for its ongoing efforts in promoting the employment of persons with disabilities. Centered on Libertas Ube, we will continue to promote the employment of persons with disabilities throughout the Group.



Certification of Good Standing as an Employer of Persons with Disabilities (Heartfelt Ribbon Mark)

### 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 in carrying out their work. Under this system, employees prepare "Career Development Sheets" and

### Training Programs

#### ● Career Education (Group Education)

- Guidance and education for new employees
- Follow-up training for new employees
- Generalist third-year training
- Key employee tenth-year training
- Key employee twentieth-year training
- Career design training
- New supervisor training
- New management training
- Follow-up training for new employees
- Management leader training
- New executive training

#### ■ Training by Theme (Group Education, e-Learning)

- Elder training
- Line management training
- Refresher course
- Compliance training
- Information security training
- Mental health training
- Human rights education
- Patent training
- MOT training
- Coaching training
- Common specialized technology education

#### ◆ Selective Training (Group Education, External Courses)

- International business personnel development (Overseas MBA programs, law school programs and overseas trainee system)
- Studying Abroad Program (Programs in universities and research institutes in Japan and abroad)
- Language School Training Program (Language school program in Japan)
- Business Leader Training (Cultivation of personnel to become key business leaders)

#### ○ Support for Self-Improvement

- Home-study courses
- Official certification
- TOEIC exams

"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 of 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 members 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 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

#### ● 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.

In accordance with the Law for Measures to Support the Development of the Next Generation, we are raising the following three initiatives from this year onward in our new three-year medium-term action plan: 1) Expand systems that promote shorter working hours to facilitate child-rearing; 2) Increase childcare leave; and 3) Encourage male employees to take childcare leave. We are also investigating ways in which to implement these initiatives.

#### ● Leave for Volunteer Activities

UBE employees are able to accumulate leave entitlements for special purposes. This system is intended to be used for volunteer activities that contribute to society or local communities.

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

	2007	2008	2009
Childcare leave	24	12	21
Nursing care leave	2	0	0

#### ● 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 arrange consultations between employees and industrial doctors.

#### ● 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.

## Promoting Mutual Understanding with Local Communities through 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. In Japan, the Foundation aims to promote academic research activities, improve research facilities and assist academic researchers in their activities in order to contribute to the future development of academic culture.

In fiscal 2009, the Ube Foundation Grant was awarded to the following 8 recipients from a total number of 107 applicants. At an award ceremony held in June 2010, Professor Ken Okazaki, Director of the Inter-Department Organization for Environment and Energy at Tokyo Institute of Technology, gave a keynote address on the future of the environmental and energy.

#### Ube Foundation Grant Recipients

Name	Position held	Research theme
Akihiko Tsuda	Associate Professor, Department of Chemistry, Kobe University	Construction of photochromic $\pi$ conjugated oligopyrroles
Takafumi Ueno	Associate Professor, Institute for Integrated Cell-Material Sciences, Kyoto University	Development of novel asymmetric solid catalysts that use protein crystal casts
Shinichi Yusa	Associate Professor, School of Engineering & Graduate School of Engineering, University of Hyogo	Construction and manufacture of gold colloid biocompatible nano-carriers capable of the controlled release of encapsulated medicine in light
Eiji Kinoshita	Associate Professor, Graduate School of Biomedical Sciences, Hiroshima University	Development of mutated DNA affinity microchip electrophoresis method oriented for rapid genetic diagnosis
Fujio Tsumori	Associate Professor, Faculty of Engineering, Kyushu University	Development of a structural transition-type photonic device
Tomohiko Murakami	Assistant Professor, Faculty of Medicine, University of Miyazaki	The function of endoplasmic reticulum stress response in cartilage and bone metabolism
Kotohiro Nomura	Associate Professor, Graduate School of Materials Science, Nara Institute of Science and Technology	Design and manufacture of high-performance, organic vanadium, complex catalysts

#### Recipient of the Watanabe Memorial Special Grant

Name	Position held	Research theme
Hisashi Kosaka	Research Student, Department of Surgery, Hyogo College of Medicine	Analysis of postoperative adhesion formation mechanisms centered on chemokines and their control and prevention

#### ● 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 support a variety of cultural and art-related activities. In August 2009, UBE provided grants to the Ube City Folk Orchestra and the Ube Music Appreciation Society, while donating \$5,000 to both the Watanabe Memorial Book Collection within the Ube City Library and the Watanabe

Memorial Culture Association Picture Book Collection in January 2010. The Watanabe Memorial Book Collection was donated to the Ube City Library in 2006 and amounts to more than 2,070 books, primarily in the field of art. Moreover, the Picture Book Collection for kindergartens and child-care centers contains more than 1,690 books.

#### ● 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 second UBE Group Charity Concert in October 2009 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. With the proceeds from these concerts being donated to the local community and schools, one horn each was given to five municipal junior high schools in Ube City at a presentation ceremony held in December 2009, while the Ube City Folk Orchestra and the Ube Music Appreciation Society received monetary donations.

The day before their performance, members of the Japan Philharmonic Orchestra participate in a "hands on concert" held by the Watanabe Memorial Culture Association for patients admitted to Ube Industries Central Hospital, and they also held a music clinic for Ube City junior high school student brass bands. A joint concert between the students and the Orchestra members is performed after the clinic.

- 1 The Ube Foundation's research grant presentation ceremony
- 2 Director Tamura presenting a monetary donation for the Ube City Library to the mayor of Ube City
- 3 The Second UBE Group Charity Concert



### ● Modern Japanese Sculpture Exhibition: UBE Biennale

UBE Biennale was founded in 1961 as Japan's first major modern sculpture exhibition held biennially, and it boasts the third-longest history for an organization of its kind in the world. In conjunction with the Biennale, UBE presents the UBE Industries Prize and offers assistance for the purchase of award-winning sculptures. At the 23rd UBE Biennale 09 held in October 2009, Hidenori Oi's sculpture, *Gravitation* was awarded the UBE Industries Prize.

## Communication with Local Communities

### ● Responsible Care (RC) Regional Dialogue Meetings

The Japan Responsible Care Council (JRCC) held the 7th RC Regional Dialogue meeting in Yamaguchi western district and the Sakai/Senboku district in order to build a relationship of trust with local residents. The 7th annual RC Regional Dialogue meeting in the Ube district was held, and it involved small groups. In addition, a plant tour and an explanation of each company's RC initiatives undertaken during over the past year were provided. Following presentation of PRTR-related matters by an NPO member, discussions were divided into three tables based on the following topics: Odor, Air/Water Quality and Waste Materials, 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.

## Interactions with Local Communities

### ● Business Facility Tours

We invite various stakeholders, beginning with nearby schools, to tour our business facilities. In fiscal 2009, the number of people participating in tours of UBE factories in the Ube District reached to 6,978. Every year, the Chiba Petrochemical Factory welcomes students from Keiyo Elementary School located in Ichihara City. In addition, Ube Shipping & Logistics, Ltd. invited local elementary students aboard a large cement tanker in May 2009. The factories in the Ube and Chiba Districts also run annual open-house days for the families of employees, and these have proven to be highly popular among the families.

### ● Chemistry Experiment Events 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 advanced technologies. In 2009, Ube Information Systems, Inc. conducted fun experiments in Ube City in a project that had the children create eco-badges and buttons using personal computers. In Tokyo, the Organic Specialty Materials Research Laboratory and the Electronic Components & Materials Business Unit gave children the opportunity to enjoy creating their own original bookmarks using high-performance plastics.

### ● Tours of Local Industrial Facilities

The UBE Group participated in tours of local industrial facilities. These tours



- ① Hidenori Oi's sculpture, which won the UBE Industries Prize
- ② RC regional dialog meeting in the Yamaguchi western district
- ③ RC regional dialog meeting in the Sakai/Senboku district
- ④ RC regional dialog meeting in the Ube district
- ⑤ Factory tour (Ube)
- ⑥ Tour aboard a Ube Shipping & Logistics tanker
- ⑦ 21st Summer Holiday Junior Science Lesson (Ube)
- ⑧ Dream/Chemistry-21 Children's Summer Holiday Chemistry Experiment Show (Tokyo)



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- 1 Pamphlet promoting tours of local industrial facilities
- 2 Goi-Rinkai Festival venue
- 3 Fourth Chemical Summer Festival
- 4 An open medical lecture held by Central Hospital
- 5 The Kanda Cement Factory's SP Tower with most of its lights shut off
- 6 Cleanup activities along a national highway in the Chiba District
- 7 The SAKAI Cool Dam Tree Planting Event, at which participants plant seven different types of trees
- 8 First Forest Creation Experiential Activity for Water Conservation (Sponsor: Yamaguchi Prefecture Mine Agriculture and Forestry Office)

### Social Capital That Revitalizes Local Communities

Based on the philosophy of "living and prospering together with our neighbors," which was established upon the founding of the UBE Group, we responded to Ube City's requests for development assistance by investing in the building of various types of social infrastructure, including the development of water supply and sewage systems, dams, electric power facilities, schools, railroads, airports and television stations. We are currently managing a hospital, golf club and hotel as a way of making a needed social contribution for the advancement of the local community.

#### Ube Industries Central Hospital

Established as a facility to treat tuberculosis in 1953, the Ube Industries Central Hospital is now designated as an acute-care medical facility that accepts patients 24 hours a day. With 93% of users being comprised of regular members of the public who reside primarily in Ube City, this hospital plays a role as a civic medical facility by offering skill training sessions chiefly for local medical/welfare-related staff and paramedics; holding open lectures on medical topics throughout the region; and airing health-care-oriented programs on a local FM radio station.

URL: [www.ube-ind.co.jp/hospital](http://www.ube-ind.co.jp/hospital)



#### Ube 72 Country Club

As a place where people in Ube City can enjoy sports and relax, while affording important guests with unparalleled hospitality, the Ube 72 Country Club, which opened in 1960, has become one of western Japan's top-class golf courses. Consequently, many people take advantage of the recreation facilities available at the Ube 72 Country Club as well as the adjacent Ube 72 Ajisu Spa Hotel. In addition, this golf course promotes recycling through mulching and composting, rather than discarding branch and grass clippings.

URL: [www.ube.co.jp/ucc](http://www.ube.co.jp/ucc)



#### ANA Hotel UBE

In order for Ube City to become more cosmopolitan, an upscale urban hotel that could accommodate international conferences was necessary. With this in mind, the ANA Hotel UBE opened its doors in 1983 along with the Ube Industries Building, which functions as an office complex. Conveniently located approximately 10 minutes away by automobile from Yamaguchi Ube Airport, the ANA Hotel UBE can safely accommodate visitors from around the world while providing a wide array of functions as a place where members of the local community can relax.

URL: [www.anahotelube.co.jp](http://www.anahotelube.co.jp)



have been conducted by a local council established to promote industrial tourism in the cities of Ube, Mine and Sanyoonoda. Called "Social Tours for Grownups," the tour takes people to places closely connected to three men, including UBE founder Sukesaku Watanabe, who were instrumental in the development of the cities of Ube, Mine and Sanyoonoda. The tour includes visits to the Okinoyama Coal Center, which was founded by Sukesaku Watanabe; cement facilities, where participants learn about the production and history of cement; and galleries that display numerous products made from limestone.

#### ● Participation in Local Events

In June 2009, the Chiba Petrochemical Factory participated in the Goi-Rinkai Festival, while the Ube Chemical Factory held the "The Fourth Chemical Summer Festival" in August 2009, in which as many as 2,500 people participated. In order to harmoniously coexist with local communities, each business office participates in this way in a wide range of community activities.

#### ● Open Medical Lectures

Ube Industries Central Hospital has been dispatching doctors throughout the local community since 2004 to hold open medical lectures with the purpose of promoting public health and disease prevention. In 2009, the hospital held a lecture five times on how to prevent stroke patients from becoming bedridden, with a total 400 people attending.

### Aiming to Contribute to Local Communities

The Kanda Cement Factory participated in the Japanese Ministry of the Environment's "CO<sub>2</sub> Reduction/Light-Down Campaign" in July 2009 by shutting off the lights on the SP Tower for two consecutive years. Likewise, a total of 31 people comprised of Sakai Factory employees and their families took part in the SAKAI Cool Dam Tree Planting Event in November 2009. In addition to these activities, 108 employees of the UBE Group participated in the Second Forest Creation Experiential Activity for Water Conservation by pruning, thinning and planting Japanese cypress trees in December 2009. Employees also voluntarily plant flowers within the premises of UBE Group sites as a beautification

measure each year, and in fiscal 2009, the Ube Chemical Factory once again competed in flowerbed contests held by Ube City, winning the Grand Prize in the spring and fall of that year. Moreover, employees continue to undertake clean-up activities in the areas surrounding Group factories.

### 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, actively expanding its communications with various stakeholders in 2009.

#### ● Sponsorship of Facility Tours

The Group sponsors numerous factory tours for members of the local community and students attending nearby schools. In 2009, we invited 10 members of Spain's national parliament, who belong to that country's major political parties, to view the Group's advanced technology.

#### ● Exchanges with High Schools and Universities

In March and April 2009, 70 students from 3 local schools were invited to the Nylon R&D Center, where we displayed our nylon resin development activities and test patterns. We also invited 50 teachers to attend lectures on plastic and recycling, take a tour of the R&D Center, and participate in a meeting to exchange opinions with staff members who work in the resin field.

The CEO of Ube Corporation Europe, S.A., Ricardo Lopez, gave lectures regarding CSR activities promoted by the UBE Group in Spain at the opening ceremony commemorating the start of a masters degree program in the area of energy conservation and sustainability at industrial facilities at Jaume I (a local university) in October 2009, as well as at a CSR-themed meeting for the Ports and Harbors Bureau held in November 2009.

#### ● Support for Sports and Cultural Activities

We continued to actively support a range of local sports teams and clubs in 2009. In addition, we sponsored such activities as the Tárrega International Guitar Competition and a Christmas concert featuring an orchestra and choir organized by the local branch of the Spanish National Organisation of the Blind (ONCE).



- ① Spanish members of parliament visiting an UBE office in Spain
- ② Students visiting the Nylon R&D Center
- ③ A lecture about plastic given to teachers
- ④ CEO Ricardo Lopez giving a lecture
- ⑤ A local junior basketball team

## Activities in Thailand

The UBE Group's bases in Thailand (UBE Chemicals (Asia) Public Co., Ltd./Thai Synthetic Rubbers Co., Ltd.) are actively promoting communication with local residents through multiple activities, based on the idea that the UBE Group is an integral 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 11th anniversary in fiscal 2009. 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 made monetary donations for the second consecutive year to Mabtaput Technical College's chemical engineer training project, which was launched March 2008.

### ● Sponsoring Factory Tours

We held numerous factory tours, inviting students attending nearby schools, including students majoring in chemistry at Kasetsart University in May 2009,

students from Rayongvittakom High School in June and students from Mahidol University in both July and October. In addition, we invited members of the local community to the UBE Open House in September 2009. Through these activities, the Thai UBE Group is providing information on its business activities, thereby fostering mutual understanding.

### ● Better Quality of Living

Promoting local community-based activities known as "Better Quality of Living," we promoted volunteer activities that help to revitalize the local community. The numerous activities we participated in include collecting donations to build public washrooms; assisting mosquito control programs and mobile public health clinics (both of which are managed by Thailand's Ministry of Public Health); supporting the Thai Government's Antinarcotics Program; and taking part in community events.

### ● Sports Promotion

Members of the local community and Thai UBE Group staff held a mini-marathon in November 2009. Moreover, soccer teams located in the area surrounding our factory participated in the eighth annual UBE-Plauk-Ket Cup.

- |  |                                       |
|--|---------------------------------------|
| ① Summer camp                                  | ⑥ Mosquito control program            |
| ② Donations made to Mabtaput Technical College | ⑦ A mobile public health clinic       |
| ③ Chemistry majors from Kasetsart University   | ⑧ Mini-marathon                       |
| ④ Mahidol University students                  | ⑨ UBE-Plauk-Ket Cup soccer tournament |
| ⑤ Open house                                   |                                       |



# 03

Hideyuki Sugishita  
Managing Executive Officer  
Responsibility for Environment & Safety Dept.



# Initiatives for Environment and Safety

At the UBE Group, conserving the environment and protecting health and safety come first in its business operations. This emphasis 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 contributions to society, environmental preservation and the maintenance of health and safety in carrying out their corporate activities. The UBE Group shall pursue the following vision in order to fulfill its leadership role and shall work to improve the safety and the quality of the environment among all of its Group companies through the publication of performance reports and the implementation of dialogues 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 April 2010

Michio Takeshita

President and Group CEO, Representative Director

## Protecting the Environment and Promoting Health and Safety for Employees and Local Communities through Top-Down Management

### Environment and Safety Promotion System

The UBE Group has established the Group Environment and Safety Committee and the Group Product Safety 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.

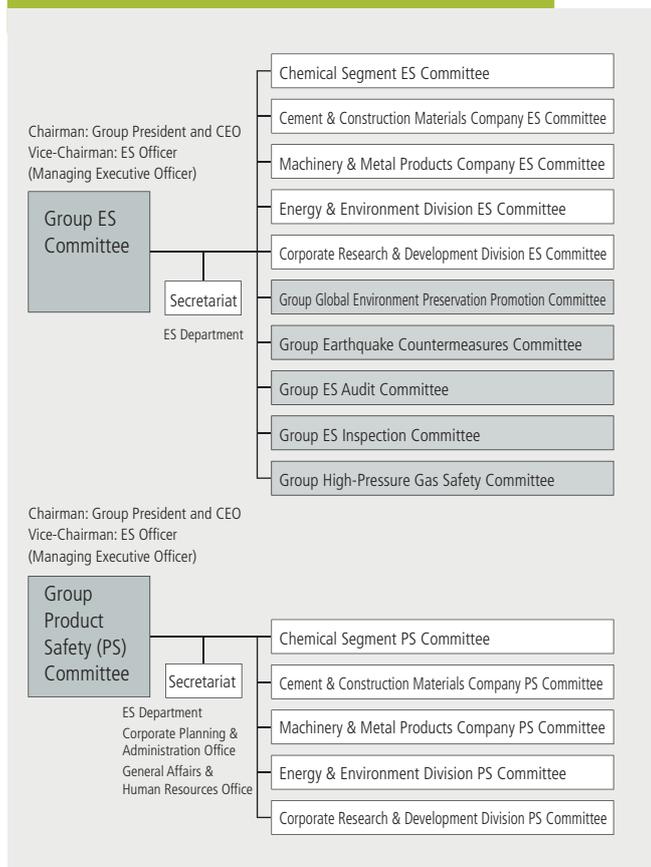
Both of these Group committees have established subcommittees for each segment involved in promoting measures for the environment, occupational safety, and product safety in each business segment, according to the policies and measures determined by the Group committees. Besides such segment subcommittees, 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

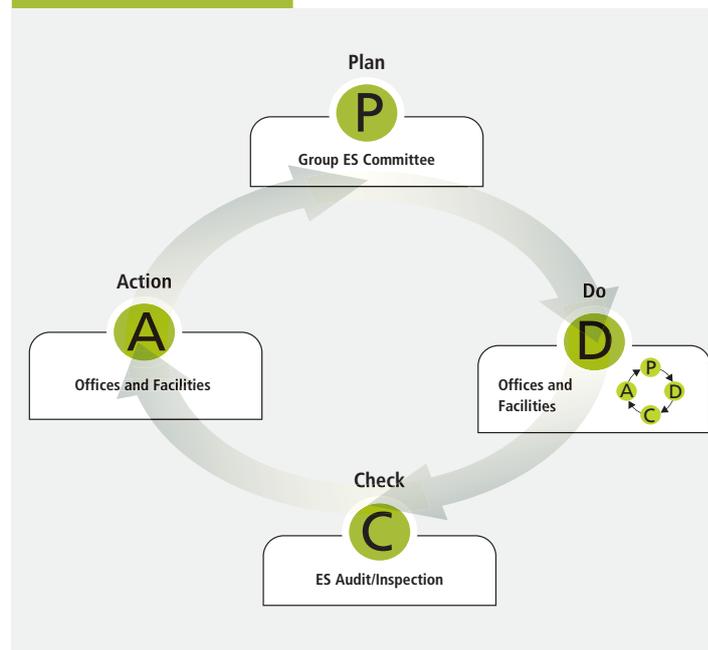
The UBE Group is expanding responsible care (RC)<sup>\*1</sup> activities across all of its business fields and is administering the Plan-Do-Check-Action (PDCA) management cycle to promote continuous improvements in the areas of the environment, safety and health.

Based on measures for the fiscal year established through deliberations and decisions made by the Group Environment and Safety Committee, each office and facility formulates action targets and schedules for its annual management plan, expanding them on a voluntary basis. The status of the plan's implementation is checked through an environment and safety audit, and each office and facility makes corrections as suggested. Audit and survey results are reported to the Environmental and Safety Department, the results of which are then reflected in the next fiscal year's measures.

#### Organization of Environment and Safety (ES) Committee



#### PDCA Management Cycle



#### Glossary

\*1. RC (responsible care): Under RC, corporations that manufacture and/or handle chemical substances work voluntarily to preserve "safety, health 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 (protect people's health and the natural environment worldwide); disaster prevention (work to prevent disasters at facilities and counter natural disasters); occupational safety and health (ensure the safety and health of workers); chemicals and product safety (clarify chemical products' properties and handling methods and thereby protect the safety and health of all handlers, including customers, while preserving the environment); and logistics safety (strive to prevent logistics-related accidents and disasters). Pursuant to these activities, communication in these areas is undertaken (announce activity details and results and promote social dialogue).

## ISO Certification and Certified Sites

The UBE Group is actively implementing measures to acquire ISO14001 and ISO9000 Series, which are the 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)

Type of Certification	Certified Factories	Year of Certification
High-Pressure Gas Equipment Inspector Certification (for Safety/Post-Completion Inspections) (High-Pressure Gas Safety Law)	UBE Industries, Ltd. (Chiba Petrochemical Factory)	2003
	UBE Industries, Ltd. (Sakai Factory)	1999
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)	UBE Industries, Ltd. (Chiba Petrochemical Factory)	1997
	UBE Industries, Ltd. (Sakai Factory)	1998

#### Notes:

- 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.
- 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.
- 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.

## RC Global Charter

Upon UBE's approval of the concepts contained within the RC Global Charter, which was formulated by the International Council of Chemical Associations (ICCA), UBE's CEO signed the Sustainability Declaration in August 2008. The RC Global Charter calls on every company to strengthen its global responsible care activities in cooperation with its country's Chemical Industry Association.

#### LETTER FOR COMPANIES-DECLARATION OF SUPPORT FOR THE RESPONSIBLE CARE® GLOBAL CHARTER

I support the Responsible Care® Global Charter which seeks companies to strengthen Responsible Care worldwide working with national chemical associations. By implementing the Charter, my company will continue to improve its environmental, health and safety performance; advance sustainable development; enhance and facilitate the appropriate extension of Responsible Care across the business value chain; and address stakeholder expectations in the continuing development of Responsible Care.

As part of these commitments, my company will work with customers and suppliers to manage its chemical products using a risk-based and life-cycle oriented approach supported by sound scientific information. These commitments include making relevant risk information publicly transparent and cooperating with governments and the public to promote the safe use of chemicals worldwide.

By implementing the Responsible Care® Global Charter, my company is playing its part in improving the quality of life of the global community.

Name: Hiroaki Tamura  
Title: President and Representative Director  
Company: Ube Industries, Ltd.  
Date: August 21, 2008

Responsible Care (RC)  
Global Charter Declaration

### Certification Acquired and the Year Awarded

Name of Company	EMS	QMS	OSHMS
Chiba Petrochemical Factory, Ube Industries, Ltd.	1999	1995	2006
Sakai Factory, Ube Industries, Ltd.	2000	1996	2005
Ube Chemical Factory, Ube Industries, Ltd.	2000	1994	2006
Ube Cement Factory, Ube Industries, Ltd.	1999	1997	2005
Kanda Cement Factory, Ube Industries, Ltd.	1999	1996	2005
Isa Cement Factory, Ube Industries, Ltd.	1999	1995	2005
Technical Development Center, Ube Industries, Ltd.	1999	/	2007
Organic Chemistry Research Laboratory, Ube Industries, Ltd.	1999	/	2007
Organic Specialty Materials Research Laboratory, Ube Industries, Ltd.	1999	/	2007
Okinoyama Coal Center, Ube Industries, Ltd.	2000	/	2007
Power generation facilities of Ube Industries, Ltd.	2000	/	2006
UMG ABS, Ltd.	2000	1992	2003
Ube Ammonia Industry, Ltd.	2001	2002	2004
Ube Maintenance Co., Ltd.	2000	2005	2006
Ube Electronics, Ltd.	2005	2000	2008
UBE Chemicals (Asia) Public Co., Ltd. (Thailand)	2002	2002	2002
Thai Synthetic Rubbers Co., Ltd. (Thailand)	2000	2002	2002
Meiwa Plastic Industries, Ltd.	2002	1999	2007
Ube Film, Ltd.	2004	2006	2009
Ube Chemical Europe, S.A. (Spain)	2009	1999	2010
Ube Engineering Plastics, S.A. (Spain)	2009	2005	2010
Ems-Ube, Ltd.	2000	1994	2006
UBE-MC Hydrogen Peroxide, Ltd.	2003	2001	2007
Ube-Nitto Kasei Co., Ltd.	2001	1997	2006
Ube Material Industries, Ltd.	2004	2001	2007
Ube Board Co., Ltd.	2006	2003	2008
Hagimori Industries, Ltd.	2004	2002	2005
Ube Shipping & Logistics, Ltd.	2000 (ISM)	2002	2000 (ISM)
Yamaishi Metal Co., Ltd.	2009	2000	2006
UBE Scientific Analysis Laboratory, Inc.	1999	2001	2007
Ube Machinery Corporation, Ltd.	1999	1996	2005
Ube Aluminum Wheels, Ltd.	2000	1998	2005
T&U Electronics Co., Ltd.	2001	2004	2006
Ube Steel Co., Ltd.	2005	1999	2007
Fukushima, Ltd.	1998	1997	2000
Ube Techno Eng Co., Ltd.	2008	2002	2007

#### Notes:

- 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.
- For Group companies that have several factories, the earliest year in which any of the factories acquired the certification is shown.

## Outline of RC Activities

The UBE Group improves PDCA cycle-related activities each fiscal year to promote increases in the quality of RC activities in line with its Responsible Care Code.

Individual targets, plans, measures and activity reports for fiscal 2009 are listed below.

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

1. Improve management systems and raise RC awareness
2. Improve the quality of occupational safety and health, process safety and disaster prevention, environmental preservation, product safety and distribution safety in a sustainable manner
3. Ensure compliance with laws, regulations, and other rules
4. Disclose performance and conduct dialogues with society
5. Fulfill corporate social responsibilities and increase corporate value by implementing the preceding items (1 to 4)

Responsible Care Code	Targets for Fiscal 2009	Planning and Policy in Fiscal 2009
Management Systems		<ol style="list-style-type: none"> <li>1. Promote compliance activities</li> <li>2. Improve high-pressure gas safety promotion systems</li> <li>3. Develop and revise rules and standards</li> <li>4. Promote green purchasing</li> <li>5. Continue/implement environment and safety audits in Japan</li> <li>6. Implement quality and product safety audits</li> </ol>
Environmental Preservation	<ul style="list-style-type: none"> <li>● Reduce output of substances that negatively impact the environment</li> </ul>	<ol style="list-style-type: none"> <li>1. Promote global warming prevention measures</li> <li>2. Further improve environmental performance</li> <li>3. Undertake thorough measures to prevent offensive odors when engaging in unplanned operations</li> </ol>
Process Safety and Disaster Prevention	<ul style="list-style-type: none"> <li>● Eliminate facility accidents</li> </ul>	<ol style="list-style-type: none"> <li>1. Ensure the operation of a PDCA cycle in maintenance management</li> <li>2. Improve Groupwide earthquake preparedness and response</li> </ol>
Occupational Safety and Health	<ul style="list-style-type: none"> <li>● Curb non-occupational injuries and illnesses</li> <li>● Reduce industrial accidents</li> </ul>	<p>Health management:</p> <ol style="list-style-type: none"> <li>1. Develop comfortable working environments</li> <li>2. Upgrade employee wellness programs</li> </ol> <p>Occupational safety:</p> <ol style="list-style-type: none"> <li>1. Improve safety activities based on OSHMS*2</li> <li>2. Carry out collective safety management activities with partner companies</li> <li>3. Enhance communication in the workplace</li> <li>4. Promote safety management measures for elderly employees</li> </ol>
Distribution Safety	<ul style="list-style-type: none"> <li>● Continue revision of "container yellow cards" to comply with GHS*1 label requirements</li> </ul>	<ol style="list-style-type: none"> <li>1. Measures to prevent distribution-related complaints and improve distribution quality</li> </ol>
Chemicals and Product Safety	<ul style="list-style-type: none"> <li>● Improve chemical safety management</li> <li>● Strengthen measures to prevent quality-related complaints and deal with unregulated products</li> </ul>	<ol style="list-style-type: none"> <li>1. Implement preparatory measures to comply with the EU's REACH*3 regulation</li> <li>2. Revise GHS MSDS*4 and labels systematically</li> <li>3. Continue measures to deal with toxic substances contained in products (RoHS*5 Directives, green procurement)</li> <li>4. Strengthen the control of losses and costs</li> </ol>
Dialogue with Communities	<ul style="list-style-type: none"> <li>● Promote dialogue with communities</li> <li>● Improve information disclosure and transparency</li> </ul>	<ol style="list-style-type: none"> <li>1. Continue implementation of RC dialogue</li> <li>2. Fulfill CSR Report (increase reliability)</li> <li>3. Implement ongoing factory tours and interactions with local communities</li> </ol>

## 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 Restriction of Chemicals)  
 \*4. MSDS: Material Safety Data Sheet (documentation containing the product name, physiochemical properties, usages, and hazard and toxicity information)  
 \*5. EU RoHS Directive: Restricts the use of certain hazardous substances in electrical and electronic equipment  
 \*6. GHG (greenhouse gas): CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC and SF<sub>6</sub> are six greenhouse gasses specified in the Kyoto Protocol.  
 \*7. BCP: Business continuity plan, which is made to minimize the suspension of business in the event of a disaster and to recover operations as early as possible to ensure business continuity  
 \*8. KPI: Key Performance Indicator  
 \*9. STOP (Safety Training Observation Program): DuPont's safety administration activity program

★ Achieved ☆ Largely achieved ● Yet to be achieved

Fiscal 2009 Activity Report		Evaluation	Pages Included
1. Promoted compliance through environment and safety audits, including emission control standards and industrial waste control		★	
2. Implemented audits at Chiba Petrochemical Factory and Sakai Factory		★	34
3. Revised/formulated relevant internal rules to address regulatory changes, as necessary		★	
4. Maintained the UBE Group's green purchasing rate at 62% and attained 99% plus usage of copy paper within UBE		☆	24
5. Implemented environment and safety audits at 10 facilities/departments and seven Group companies in Japan		★	34
6. Implemented quality/product safety audits at three facilities/departments and eight Group companies in Japan		★	34
1-1. Achieved a UBE Group CO <sub>2</sub> emissions volume reduction target of 12% (compared with the 1990 level) ahead of schedule: a decrease of 25% (compared with the 1990 level)		★	40
1-2. Operated a data administration system for the amount of energy used and greenhouse gas* <sup>6</sup> (GHG) emissions		★	40
1-3. Established CO <sub>2</sub> emission-reduction targets in the new medium-term management plan		★	40
2-1. Voluntarily reduced the emissions of 12 chemical substances by 78% (compared with the 2000 level). Attained the medium-term target ahead of schedule		★	42
2-2. Reduced the amount of industrial waste that undergoes final processing externally by 68% (compared with the 2000 level). Attained the medium-term target ahead of schedule		★	45
3. Thoroughly implemented notification prior to the start and finish of unplanned operations		★	
1. Verified the status of full facility inspections during environment and safety audits. Four leakage-related accidents and three fire-related accidents occurred.		●	47
2. Implemented BCP* <sup>7</sup> earthquake response drills in Tokyo, Chiba and Ube		★	20
1. Implemented activities relating to the Meet and Greet Campaign and carried out lifesaving drills, measures for the elderly and mental health, and initiatives to counter lifestyle-related diseases		★	25
2. Responded to the outbreak of the new strain of influenza		★	20, 25
1. New certification acquired by one domestic Group company and two Group companies overseas; enhanced risk assessment		★	35, 47
2. Implemented safety audit at affiliate companies		★	
3. Held KP1* <sup>8</sup> seminars and safety dialogue meetings with external lecturers (development of STOP* <sup>9</sup> activities)		★	
4. Developed guidelines on measures for elderly workers and implemented thorough measures to prevent forklift accidents and industrial accidents		★	
1. Implemented measures to prevent distribution-related complaints and improve distribution quality are underway		★	24
1. Gathered registration-related information and undertook the registration procedures in Japan, Europe and Thailand		★	23
2-1. Sequentially revised MSDSs and labels in Japan and overseas		★	23
2-2. Implemented full-fledged use of GHS-type MSDS development software and databases		★	23
3. Continued to address raw resource procurement issues (RoHS Directives and green procurement)		★	24
4. Currently promoting loss and cost controls Groupwide		★	
1-1. Held the 7th Community RC Dialogue Meeting at the Yamaguchi western district and the Sakai/Senkoku district		★	29
1-2. Held in the 7th RC Regional Dialogue Conference in the Ube District		★	29
2. Received third-party verification of CSR Report 2009 related to RC		★	56
3. Number of observers in the Ube District: 6,978 people		★	29

## 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 2009 are as shown in the following tables.

### ● Environmental Preservation Costs

Capital investment decreased by ¥900 million compared with fiscal 2008, to ¥2,530 million. The main reason for the reduction was the completion of capital investment in industrial waste recycling and other areas.

Costs increased by ¥430 million over fiscal 2008, to ¥11,170 million, chiefly due to an increase in depreciation and amortization expenses associated with the full operation of industrial waste recycling facilities, for which investments were made in fiscal 2008, as well as an increase in facility repair costs.

### ● Economic Effect

The income effect amounted to ¥450 million. This figure includes proceeds from the sale of marketable waste.

The saving effect was ¥6,910 million due to promoting the reuse of raw materials and energy-conservation.

### Environmental Preservation Cost

(Unit: ¥100 million)

Category		Main Activity	Capital Investment			Cost		
			2008	2009	Difference	2008	2009	Difference
Cost by business area	Pollution prevention	Costs of investing in and maintaining air and water pollution prevention facility	11.0	14.3	3.3	53.7	52.6	(1.1)
	Global environment preservation	Costs of investing in and maintaining energy-saving facility	6.3	2.8	(3.5)	3.1	4.6	(1.5)
	Resource recycling	Costs of recycling and reducing industrial waste	15.3	7.8	(7.5)	28.9	32.9	4.0
Upstream/downstream costs		Costs of container/packaging recycling, green purchasing	0.4	0.0	(0.4)	6.7	7.2	0.5
Costs of management activities		Costs of acquiring, running and maintaining environmental management systems	0.2	0.1	(0.1)	4.5	5.1	0.6
Research and development costs		R&D costs of environment-friendly products and technologies	0.8	0.3	(0.5)	5.8	4.3	(1.5)
Costs of social activities		Costs of greening and beautifying offices/facilities and their surroundings	0.3	0.0	(0.3)	2.2	2.2	0.0
Costs of cleaning up environment damage		Payment of environment-related levy	0.0	0.0	0.0	2.5	2.8	0.3
Total			34.3	25.3	(9.0)	107.4	111.7	4.3

### Economic Effect

(Unit: ¥100 million)

Category	Income effect	2008	2009	Difference
Income Effect	Revenues from acceptance of industrial waste*	6.3	4.5	(1.8)
	Proceeds from sales of marketable waste products	(102.5)	(93.9)	(8.6)
Saving Effect	Savings achieved through resource recycling and energy conservation	68.3	69.1	0.8

\* 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.

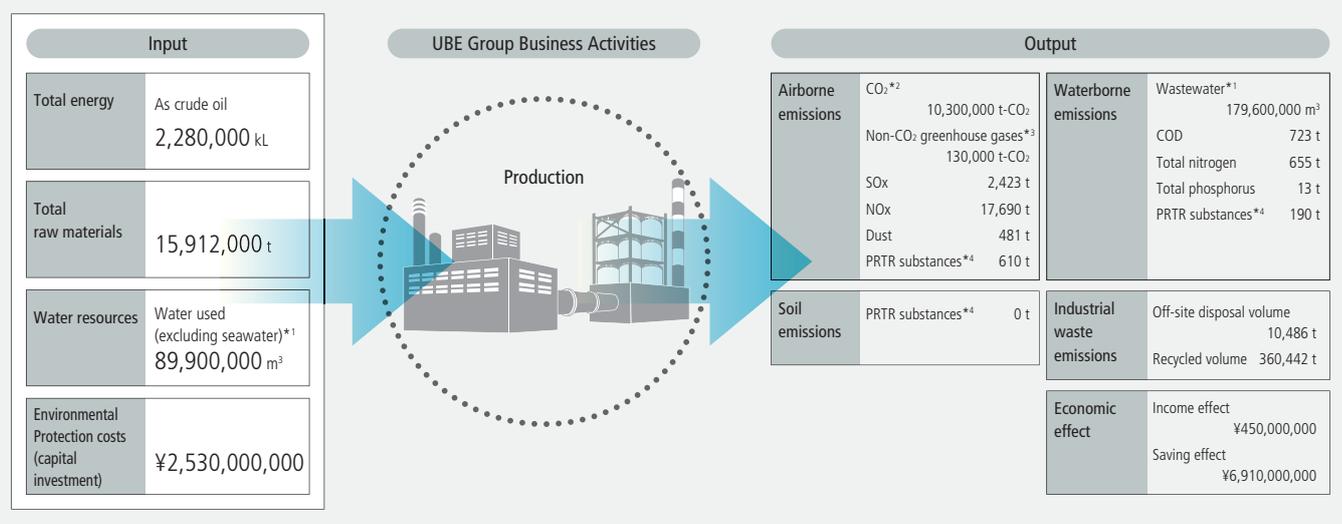
### UBE Group Environmental Accounting Method

- Companies covered: UBE Group companies (Except for UBE-MC Hydrogen Peroxide, Ltd., only consolidated subsidiaries from "Companies covered" on page 8).
- 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 2009



See "Companies covered" on page 8 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 CO<sub>2</sub> emissions (excluding raw combustible material waste)

\*3. CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, and SF<sub>6</sub>

\*4. PRTR figures are based on 480 substances designated by the Japan Chemical Industry Association (JCIA) (See page 43 for reference).

### Fiscal 2008 and 2009 Environmental Data by Factory

(Unit: tons/year)

	SO <sub>x</sub> emissions		NO <sub>x</sub> emissions		Dust emissions		COD emissions		Total nitrogen emissions		Total phosphorus emissions		Industrial waste off-site disposal volume	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Ube Chemical Factory	1,650	1,420	3,646	3,800	149	135	452	372	468	386	7.0	5.5	200	189
Chiba Petrochemical Factory	24	2	25.4	3.1	1.7	2.2	5.6	4.8	2.8	2.3	0.1	0.1	32	21
Sakai Factory	0	0	165	142	27	28.7	224	135	335	205	3.0	3.7	120	121
Ube Film, Ltd.	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Meiwa Plastic Industries, Ltd.	—	—	—	—	—	—	0	0.1	0	0	0	0	38	13
Ube Ammonia Industry, Ltd.	537	540	563	413	28.4	3.4	243	188	56.1	65.8	5.0	3.5	38	30
Ems-Ube, Ltd.	0	0	4.8	5.2	0	0	6.2	6.1	1.6	1.5	0	0	0	0
UBE-MC Hydrogen Peroxide, Ltd.	—	—	—	—	—	—	0.2	0.2	0	0	0	0	1	0
Ube-Nitto Kasei Co., Ltd.	1.5	0.9	1.6	1.3	0.2	0.1	1.1	1.0	0	0	0	0	32	54
Ube Cement Factory	48	47	1,628	1,371	57	52	11.6	10.7	—	—	—	—	0	0
Isa Cement Factory	339	308	7,548	8,244	110	146	0	0	—	—	—	—	0	0
Kanda Cement Factory	13	6	2,318	2,477	70	57	1.2	1.7	0.9	0.7	—	0.1	0	1
Ube Material Industries, Ltd.	160	86	1,330	1,167	59	35	—	—	—	—	—	—	3,607	4,128
Ube Board Co., Ltd.	0.6	0.6	7.7	7.5	3	3	0.1	0.2	0.1	0.2	0	0	1,198	733
Ube Machinery Corporation, Ltd.	0	0	—	—	—	—	1.2	1.1	2	1.6	0.3	0.2	99	104
Ube Aluminum Wheels, Ltd.	0.4	0.7	11.4	12.9	1.1	0.9	0.3	0.3	0.3	0.2	0	0	45	172
Ube Steel Co., Ltd.	15.6	12.5	44	46	10.6	18.1	0.6	0.6	0	0	0	0	213	4,688
Okinoyama Coal Center	—	—	—	—	—	—	0	0	—	—	—	—	31	25
Spain	164	244	547	314	53	38	252	118	613	108	1.82	2.8	4,072	8,071
Thailand	73	3	46	29	14	5	40	60	30	29	1.6	0	900	876

## The UBE Group is Contributing to the Creation of a Low-carbon Society by Reducing CO<sub>2</sub> through Its Products and Technologies, as Well as through Its Efforts to Conserve Energy and Make Effective Use of Waste Materials

### New Medium-Term Management Plan ("Stage Up 2012—New Challenges")

#### Targets for Reducing Greenhouse Gasses

1. CO<sub>2</sub> emissions from energy use: Reduce by 15% compared with fiscal 1990 levels by fiscal 2015
2. Total CO<sub>2</sub> emissions from energy use and non-energy use (excluding emissions from waste): Reduce by 20% compared with fiscal 1990 levels by fiscal 2015

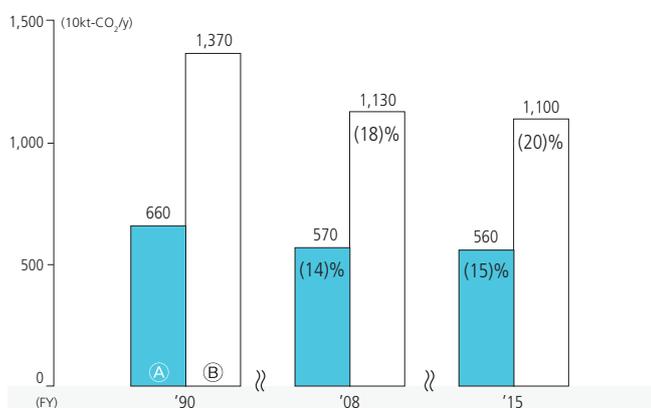
#### Initiatives until Fiscal 2012

- Reduce CO<sub>2</sub> emissions from energy use by approximately 180,000 tons per year by engaging in such efforts as introducing energy-saving equipment and expanding the use of waste materials
- Oversee and administer CO<sub>2</sub> emission levels by using a GHG\*1 management system that enables precise and swift monitoring of CO<sub>2</sub> emission levels for each place of business.
- Applying the concept of lifecycle analysis (LCA) to its main products, the UBE Group undertakes a qualitative assessment of the status of CO<sub>2</sub> emissions and reduction at all stages, from raw material procurement, through manufacture, distribution and consumption, and finally to recycling and disposal.

### Develop Technologies/Products that Contribute to the Environment and Expand Business Segments

Working to expand strategic growth businesses, we are promoting the transition of core businesses towards applications that contribute to the environment. At the same time, we are promoting early commercialization of developing businesses. Through these efforts, we aim to expand net sales from approximately ¥40.0 billion in fiscal 2009 to about ¥120.0 billion in fiscal 2015. The Group will help protect the environment by popularizing the use of its environment-friendly materials worldwide.

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



(A) CO<sub>2</sub> emissions from energy use

(B) CO<sub>2</sub> emissions from energy use and non-energy use (excluding emissions from waste)

### The Previous Medium-Term Plan "Stage Up 2009"

1. CO<sub>2</sub> 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 CO<sub>2</sub> of 100,000 tons (CO<sub>2</sub> equivalent) annually by fiscal 2010
3. The above two targets are to be achieved in fiscal 2009, which is earlier than scheduled.

### Measures to Reduce Greenhouse Gasses

#### ● Achieved Targets Set in the Previous Medium-Term Management Plan

The UBE Group achieved target No. 1) and target No. 2), established in the previous medium-term management plan, ahead of schedule in fiscal 2007 and fiscal 2008, respectively. In order to attain the targets set in its new medium-term management plan, the Group will continue to undertake measures that conserve energy and reduce CO<sub>2</sub> emissions.

#### ● CO<sub>2</sub> Emissions and CO<sub>2</sub> Emission Intensity Index

Amid worsening economic conditions, the CO<sub>2</sub> emissions in fiscal 2009 fell 9% year on year, which is a 25% reduction compared with the 1990 level. However, the CO<sub>2</sub> emission intensity index rose about 20% compared with the fiscal 1990 level, remaining unchanged from the previous year.

#### ● Energy Consumption and Energy Consumption Intensity Index

Energy consumption in fiscal 2009 decreased 10% year on year, but the energy consumption intensity index remained unchanged.

#### ● Efforts in Factories

Waste plastic that was previously disposed of in landfills and raw sludge extracted from sewage treatment plants is being reused as energy and raw materials at the Group's cement factories. Although we accepted the yearly total of 3.03 million tons of waste and industrial byproducts in fiscal 2009, we plan to take in an even greater volume of waste thanks mainly to future capacity investment.

The Isa Cement Factory's in-house thermal power facility and the Group's 216MW thermal power facility began using wood biomass,\*2 including wood-chips as a boiler fuel, from 2003 and 2006, respectively. We are also continuing to investigate new uses for biomass fuels.

Furthermore, we began operating heat-recovery facilities from gas emitted at each cement factory's clinker coolers, used as a fuel source for preheating boiler water feeds at our 145MW thermal power facilities. By instituting such measures, we have been able to reduce the amount of energy derived from fossil fuels since fiscal 2010. Consequently, we plan to decrease CO<sub>2</sub> emissions by approximately 180,000 tons per year.

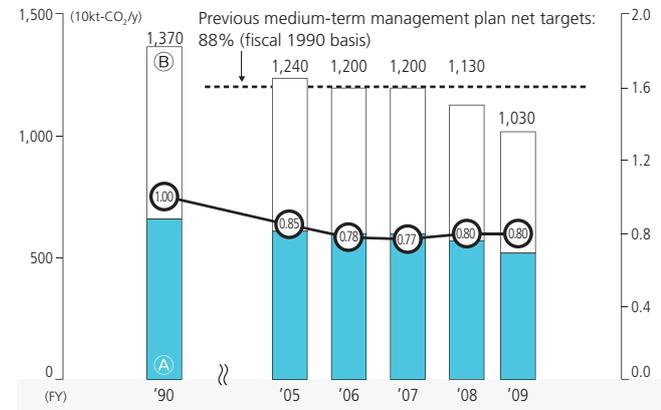
### Glossary

\*1. GHG (greenhouse gas): CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC and SF<sub>6</sub> are six greenhouse gasses specified in the Kyoto Protocol.

\*2. 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.

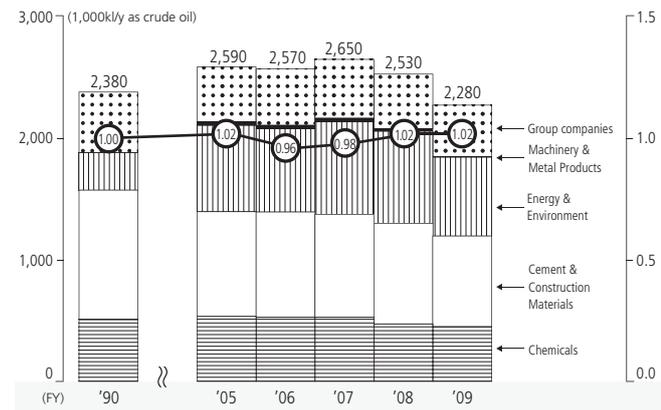
\*3. Modal shift: A shift from truck transport to rail and domestic shipping-based transport that uses less energy per amount transported.

CO<sub>2</sub> Emissions and CO<sub>2</sub> Emission Intensity Index



(A) Energy-based CO<sub>2</sub> emissions (B) Non-energy-based CO<sub>2</sub> emissions (excluding emissions from waste)  
 ○ CO<sub>2</sub> emission intensity index (fiscal 1990 basis)

Energy Consumption and Energy Consumption Intensity Index



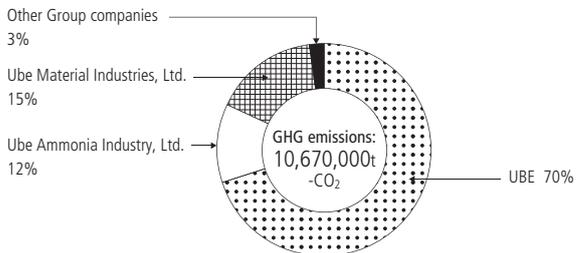
○ Energy intensity index (fiscal 1990 basis)

The volume of energy consumption and CO<sub>2</sub> emissions are calculated based on the Act on the Rational Use of Energy and the Act on Promotion Measures to Cope with Global Warming.

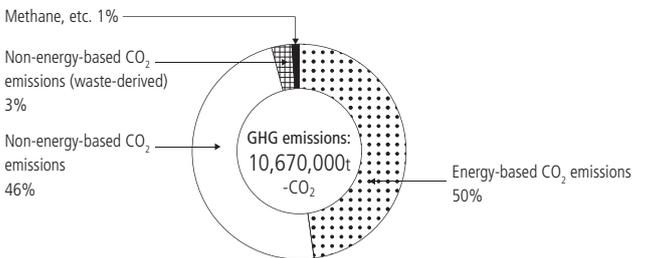
● Efforts in Logistics

In the Logistics Re-engineering Project, which seeks to improve the efficiency of sales and logistics, the Chemical segment and UMG ABS, Ltd. successfully undertook joint transport for a portion of their products. In terms of main transportation routes to the Kanto and Tokai regions, freight that was previously transported in portions by 10-ton trucks has been switched to 20-ton trailer trucks to maximize vehicle effectiveness. In order to deliver products more efficiently, we consolidated our storage and shipping bases. In the years ahead, we will expand the scope of joint transport operations and further promote the modal shift\*3 we are making in this area. Through these efforts, we will move forward with reductions in both environmental impact and cost.

GHG Emissions for UBE Group/by Company (Fiscal 2009 Results)



GHG Emissions for UBE Group/by Type of Gas (Fiscal 2009 Results)



Fiscal 2009 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 CO<sub>2</sub> emissions comprised more than 90% of all CO<sub>2</sub> emissions.



Guest Message

Toshio Hosoya, Production and Environment Division General Manager, Japan Cement Association (JCA)



Addressing the JCA's Voluntary Environmental Action Plan

The cement industry has been participating in Nippon Keidanren's (Japan Business Federation) voluntary environmental action plan since the beginning of 1996. The goal of the plan is to reduce the intensity index for energy used in the manufacture of cement (thermal energy from cement manufacturing + thermal energy used for in-house power generation + energy from purchased electricity) by 3.8% compared with the 1990 level, by fiscal 2010. The JCA is working vigorously to attain the above goal, which is being achieved as an average value over the five-year period between fiscal 2008 and fiscal 2012. We expect to realize this goal thanks to the cooperation of UBE and other participating companies.

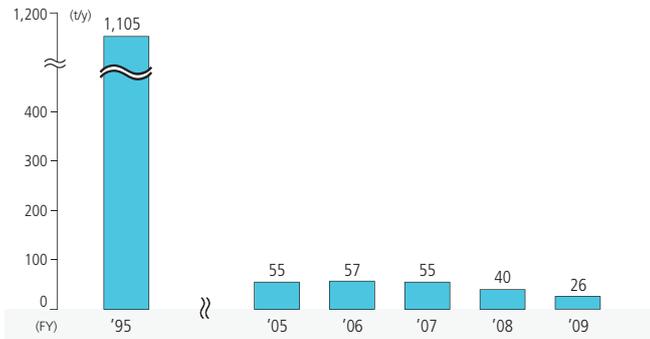
Amid a continuing decrease in public-sector investment, we will do our utmost to position cement production as a key industry within today's recycling-oriented society. We will carry out this task despite the significant adverse effect caused by the impact of revisions to the Building Standards Act enacted three years ago; the onset of the Lehman Shock in 2008; and the new Japanese government's policy of increasing funding for social programs while decreasing investment in public works projects, which began last year.

# Implementing Appropriate Chemical Management and Voluntary Emission Reduction of Toxic Chemical Substances

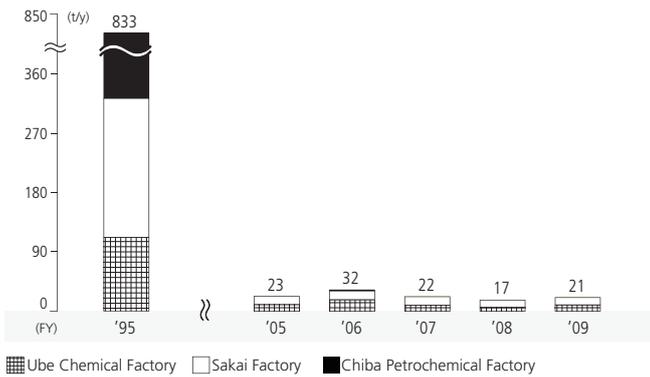
## Initiatives to Reduce the Emission of Harmful Air Pollutants

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 of these pollutants. Among the 12 substances listed, the UBE Group uses benzene, 1,3-butadiene, acrylonitrile, solvent-use benzene, 1,2-dichloroethane, chloroform and dichloromethane in its synthetic raw materials. Regarding benzene and 1,3-butadiene, which are suspected to be particularly harmful, the Group promoted a drastic reduction of their emissions and achieved a decrease of 98% in both cases, compared with fiscal 1995. In addition, the Group attained a 98% reduction in total emissions for six of these substances.

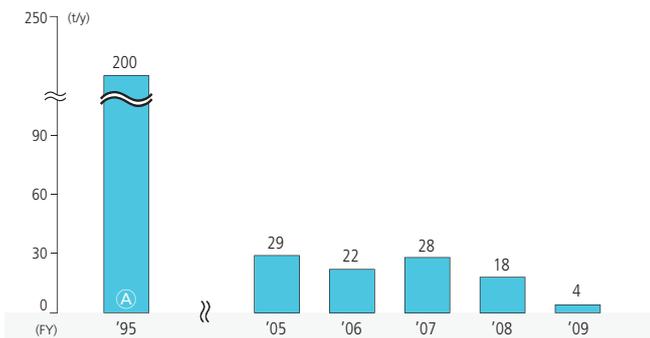
Total Emissions Volume of Six Harmful Air Pollutants



Benzene Emissions Volume



1,3-Butadiene Emissions Volume



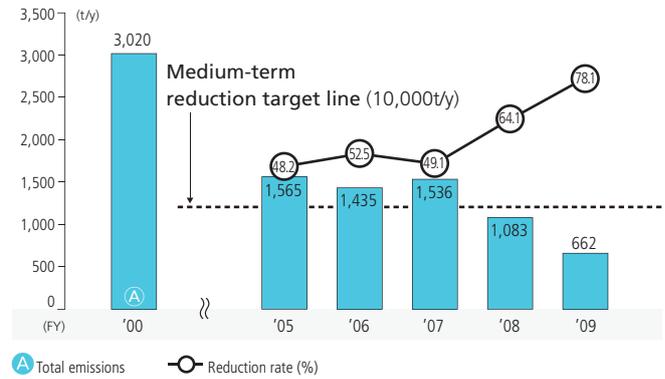
Chiba Petrochemical Factory

## 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 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, the Group reduced emissions of these substances by 78%.

Our goal of reducing emissions by 70% compared with fiscal 2000 by fiscal 2012 has been formulated in the new medium-term management plan.

Emissions and Reduction Rate of 12 Voluntarily Selected Toxic Substances



Total emissions (A) Reduction rate (%)



The washing and absorption towers at the polyimide production facility located within the Ube Chemical Factory premises



Cyclohexane recovery facility located within the Ube Chemical Factory premises

## Pollutant Release and Transfer Register (PRTR)

Among the 354 substances designated under the PRTR<sup>\*1</sup> Law, the UBE Group handles 50 of them, and UBE handles 36. Furthermore, in fiscal 2005 the Group started surveying VOCs<sup>\*2</sup> related to the 480 substances designated by the Japan Chemical Industries Association (JCIA). Of these, 86 substances are handled by the Group as a whole and 73 by UBE itself.

Compared with fiscal 2008, our total emissions of the substances specified by JCIA, including VOCs, were reduced by 37% 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 appropriately stores and makes use of PCB-containing transformers, condensers and fluorescent lighting stabilizers in its factories in accordance with the Law Concerning Special Measures against PCB Waste. The Group will store and treat PCBs in an appropriate and safe manner up until July 2018.

### ● 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

(Unit: t)

	Total handling volume (Volume used/produced)	Emissions volume				Increase/decrease rate compared with fiscal 2008 (total emissions)	Transfer volume
		Atmosphere	Public water	Soil	Total		
PRTR Law basis	508,880	292.6	132.2	0.0	424.8	(16)%	1,657.2
JCIA basis	1,874,295	610.0	189.7	0.0	799.7	(37)%	4,109.8

Transfer volume: Volume externally treated as waste

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

(Unit: t)

Ordinance designation number	Chemical substance	CAS No.	Handling volume	Emissions volume				Increase/decrease rate compared with fiscal 2008 (total emissions)	Transfer volume
				Atmosphere	Public water	Soil	Total		
227	Toluene	108-88-3	724	118.1	26.1	0.0	144.2	(17)%	398.5
61	$\epsilon$ -caprolactam	105-60-2	202,050	0.0	90.9	0.0	90.9	0%	388.3
63	Xylene	*	171	55.8	0.0	0.0	55.8	2%	27.1
40	Ethylbenzene	100-41-4	48	32.8	0.0	0.0	32.8	(6)%	17.0
102	Vinyl acetate	108-05-4	5,441	27.8	0.0	0.0	27.8	17%	0.0
299	Benzene	71-43-2	78,536	20.7	0.5	0.0	21.2	21%	0.0
85	Chlorodifluoromethane (HCFC-22)	75-46-6	10	10.0	0.0	0.0	10.0	(26)%	0.0
224	1, 3, 5 trimethylbenzene	108-67-8	10	8.7	0.0	0.0	8.7	(8)%	0.0
304	Boron and boron compound	*	40	0.7	4.5	0.0	5.2	(2)%	0.9
268	1,3-butadiene	106-99-0	95,633	4.4	0.0	0.0	4.4	(76)%	0.0
177	Styrene	100-42-5	189	4.3	0.0	0.0	4.3	0%	0.5
43	Ethylene glycol	107-21-1	53	0.0	2.5	0.0	2.5	37%	0.7
179	Dioxins	*	—	203.0	2.0	0.0	205.0	(12)%	0.1

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.

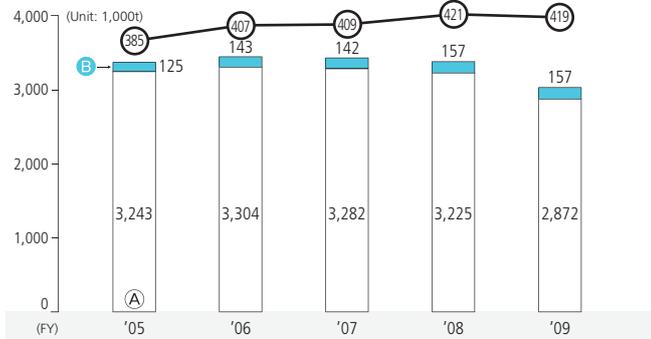
Waste Recycling at Cement Factories

Waste can be reused as a raw material (material recycle) and an alternative fuel (thermal recycle) 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 disposed of 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 (Ube, Isa and Kanda) actively accept and re-use various waste materials, such as slag, coal ash, refuse incineration ash, sludge, waste fluids and waste plastics, from UBE and companies both inside and outside the Group. In fiscal 2009, the Group's cement factories made effective use of around 3.03 million tons of waste and byproducts. Of this, about 3.0 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.

UBE will strengthen its systems for dealing with a variety of waste and expand its recycling business.

Waste and Byproduct Consumption Volume



(A) Waste and byproducts for raw materials (B) Waste for alternative thermal energy  
 ○ Usage volume per ton of cement (kg/ton)



Guest Message

Mitsutoshi Yoshioka, General Affairs Manager, Marusumi Paper Co., Ltd.



Recycling Waste for Use in Cement Production

Marusumi Paper Co., Ltd. is a leading Japanese paper manufacturer that boasts the 4th largest production volume of newsprint in the industry. The Company also manufactures a wide array of paper products in such areas as publishing, printing, information distribution, telephone books and wrapping materials.

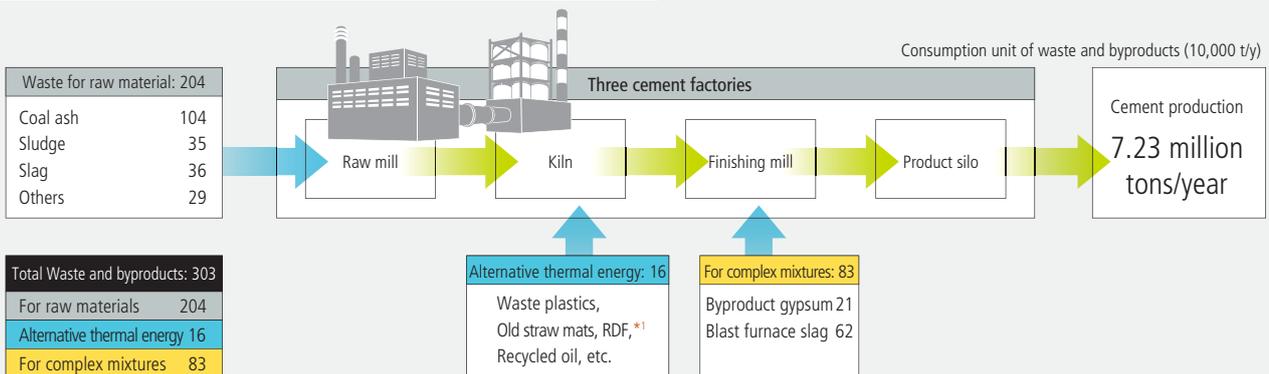
As our most important partner through its efficient use of such cement raw materials as coal ash, Ube Industries, Ltd. plays an indispensable role in our efforts to reduce ISO14001 waste materials. Based on operational circumstances, we have been undertaking stable waste material-related transactions with Ube Industries, Ltd. since we began operations.

Looking ahead, we will work to further reinforce the relationship that we have forged with Ube Industries, Ltd.

Cement Factory History of Waste Treatment Facility Installations

	Alternative thermal energy	For Raw Material
1998	Kanda Factory: Waste oil treatment facility	Isa Factory: Chlorine bypass system
1999		Ube/Kanda Factories: Waste water receiving treatment facility
2000	Ube Factory: Waste plastic treatment facility (1st train)	
2001		Ube Factory: Sewage sludge treatment facility
2002	Kanda Factory: Waste plastic treatment facility (1st train)	Isa Factory: Sewage sludge waste treatment facility (1st train) Ube Factory: Chlorine bypass system Ube/Isa/Kanda Factories: Meat and bone meal treatment facility
2003	Isa Factory: Plastic waste treatment facility (1st train)	
2004	Isa Factory: Wood chip combustion facility for in-house power generation Isa Factory: Waste plastic treatment facility (2nd train)	
2005		Kanda Factory: High-chlorine bypass system
2006	Kanda Factory: Waste plastic treatment facility (2nd train)	
2007	Ube Factory: Waste plastic treatment facility (2nd train)	Isa Factory: Sewage sludge waste treatment facility (2nd train)
2008	Isa Factory: Waste plastic treatment facility (3rd train)	Kanda Factory: Waste for raw material loading facility
2009	Kanda Factory: Waste plastic treatment facility (3rd train)	Kanda Factory: Fly ash treatment facility
2011	Kanda Factory: Facility to product fuel from waste plastic	

Flow of Waste and Byproduct Utilization in Cement Factories in Fiscal 2009

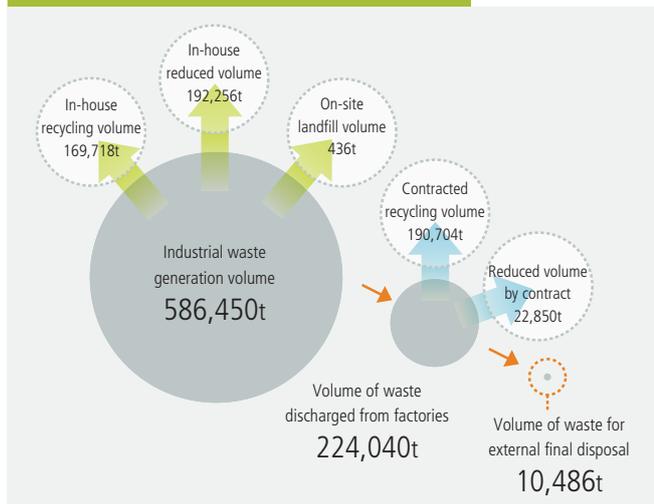


# Reducing Final Waste Disposal through Appropriate Industrial Waste Management

## Medium-Term Plan for Voluntary Waste Reduction

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

## Overall Flow of Industrial Waste in Fiscal 2009



## Status of Industrial Waste Reduction Activities

### ● Industrial Waste Generation Volume

Industrial waste is generated by many sources. Chemical-related factories and facilities primarily 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.

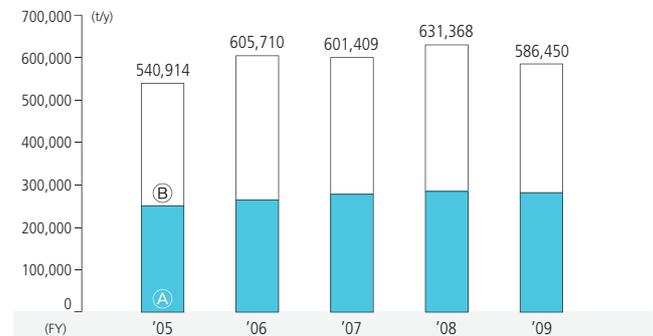
### ● Volume of Industrial Waste for External Final Disposal

We achieved a 68% reduction, reaching our medium-term fiscal 2009 target of a 60% reduction ahead of schedule.

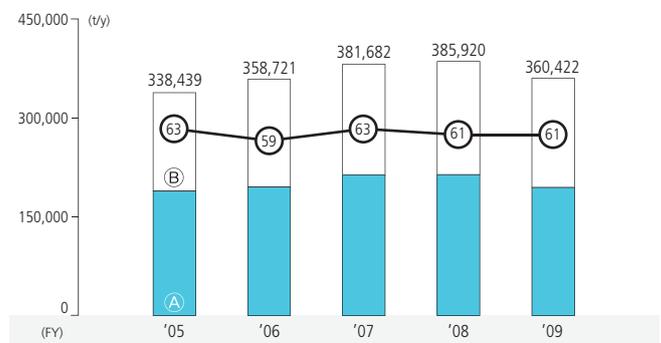
In addition, we have set as a target of our new medium-term management plan a reduction of external final disposal by 80% within fiscal 2012, as compared with the fiscal 2000 level.

Ⓐ UBE Ⓑ Group companies ○ Group waste recycling ratio (%)

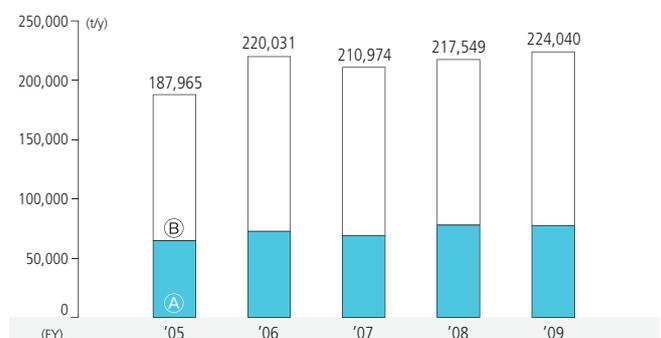
## Industrial Waste Generation Volume



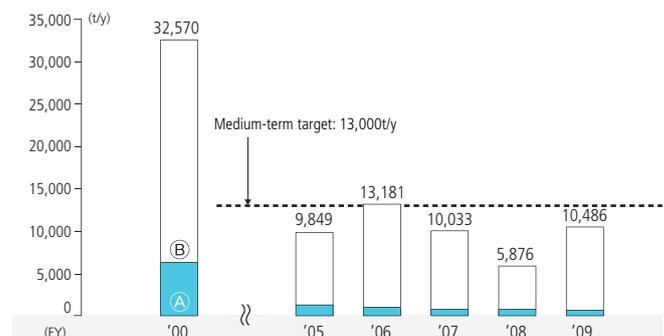
## Industrial Waste Recycling Volume and Ratio



## Volume of Industrial Waste Discharged from Factories



## Volume of Industrial Waste for External Final Disposal



## Glossary

\*1. Refuse Derived Fuel (RDF): Solid fuel made by compressing waste plastic, scrap wood and general garbage.

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 these measures are reflected in our factory operations.

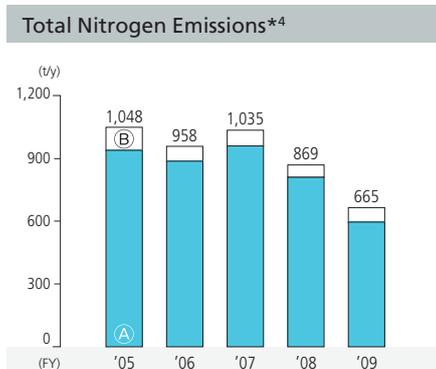
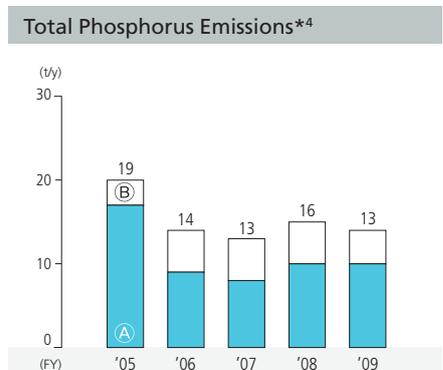
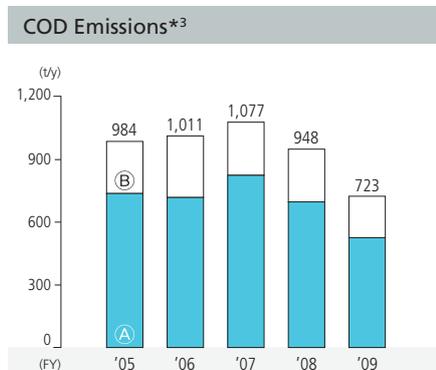
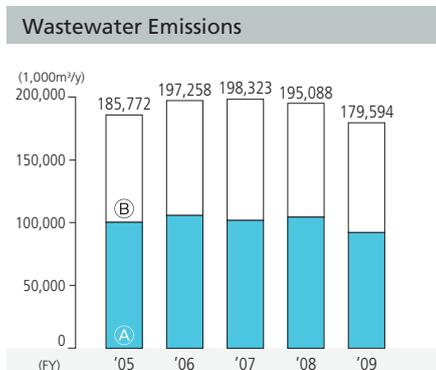
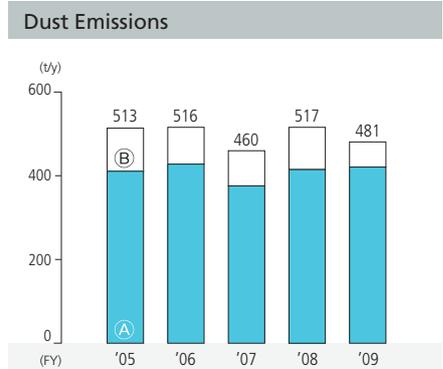
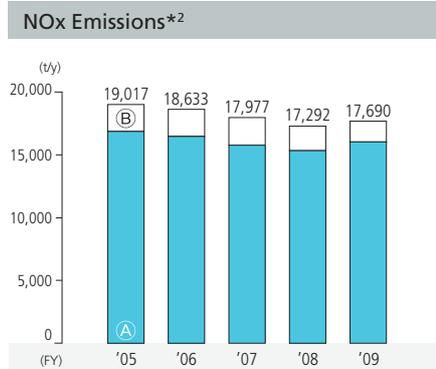
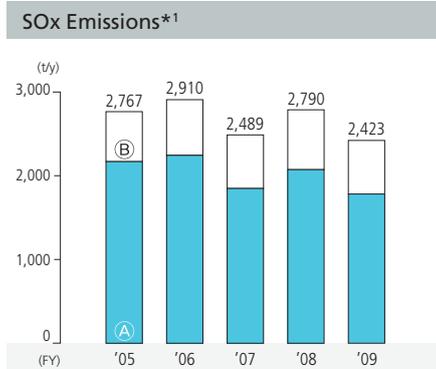
● Measures to Prevent Water Pollution

The UBE Group has installed systems to monitor discharges of pollutants in water environments. In addition, UBE Group chemical plants, which can have an impact on public water quality, purify wastewater through the use of wastewater treatment facilities.

● Measures to Prevent Odors

In the Ube district, the Group is taking steps to establish an odor monitoring system and decrease the number of odor-related complaints it receives.

Ⓐ UBE Ⓑ Group companies



Reference: Please refer to p. 39 for environmental impact data by factory

Glossary

\*1. SOx: Sulfur oxides originate in the sulfur (S) component of fuels. Boilers are the main source of SOx.  
 \*2. NOx: 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.  
 \*3. COD (Chemical Oxygen Demand): This is an indicator of water pollution by organic substances and represents the amount of oxygen consumed in the chemical oxidation of organic matter.  
 \*4. Total phosphorus, total nitrogen: These are indicators related to the maintenance of living environments in oceans and lakes.

# Implementing Occupational Safety and Process Safety Measures to Ensure the Safety and Security of Employees and Members of the Local Community

## Measures to Prevent Occupational Accidents

To eradicate occupational accidents, the UBE Group promotes risk-assessment activities for facilities and operations. In addition, we are implementing measures in a lateral manner in this area by storing occupational accident-related information on a database that is displayed on the Company's intranet. In fiscal 2009, we undertook initiatives to eliminate occupational accidents through small group, which have been achieving steady results.

### Measures against Asbestos

As a result of health hazard-related surveys that determine whether or not employees have been exposed to asbestos, the Group cooperates in the submission of industrial accident reports by individuals whose examination results warrant medical attention. In addition, we recommend that employees who have handled asbestos-related products, including those who are now retired, undergo health examinations.

The Group also appropriately treated problems at locations where a high rate of asbestos diffusion was found. In addition, the Group is promoting systematic measures for the disposal and replacement of asbestos materials. Moreover, insulation and gasket packing 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 2009, the UBE Group performed 35 chemical substance safety assessments.

## Taking Steps to Maintain Process Safety and Safe Operations

### Plant Safety Assessment

The methods stipulated in the plant safety assessment standards are followed when carrying out pre- and post-plant safety assessments of newly installed, additional, or modified facilities. Such assessments are also carried out when relevant laws and ordinances are either established or revised. In fiscal 2009, the UBE Group carried out 38 safety assessments.

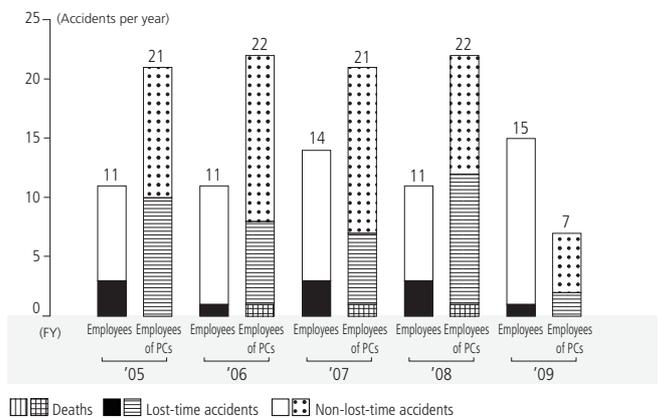
### Emergency Training

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 the Company intranet so that it is informative to an even greater number of people.

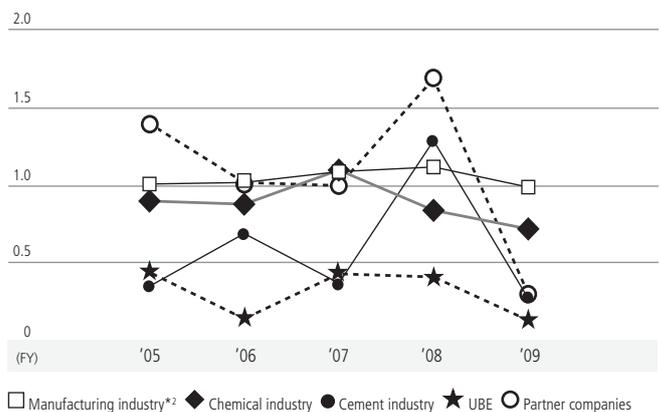
### Environment & Safety Qualification

We encourage employees to obtain legally recognized qualifications for the safe operation and management of various workplaces.

Number of Occupational Accidents (Involving Employees of UBE and Those from Partner Companies (PCs))



UBE Lost-Time Injury Frequency Rate\*1

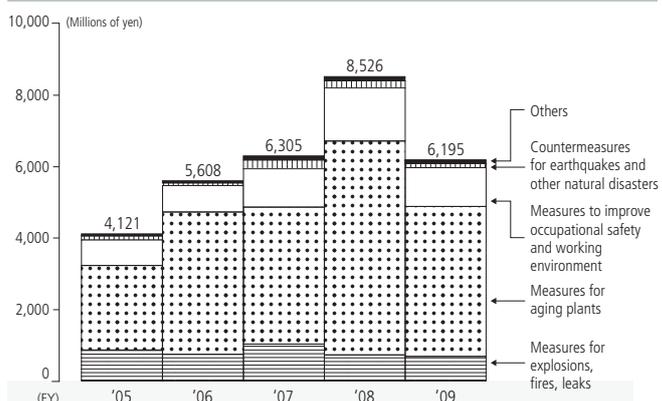


\*1. Frequency rate = (Number of lost-time injuries)/(total work hours) x 1,000,000 hours  
\*2. Data on lost-time industry frequency rates for the manufacturing, chemical, and cement industries is based on statistics supplied by the Ministry of Health, Labour and Welfare

UBE Group Facility-Related Accidents (including environmental accidents)

	2005	2006	2007	2008	2009
UBE	0	0	0	0	5
Group companies	1	3	1	4	2

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



# Socially Valuable Products and Technologies of UBE Group

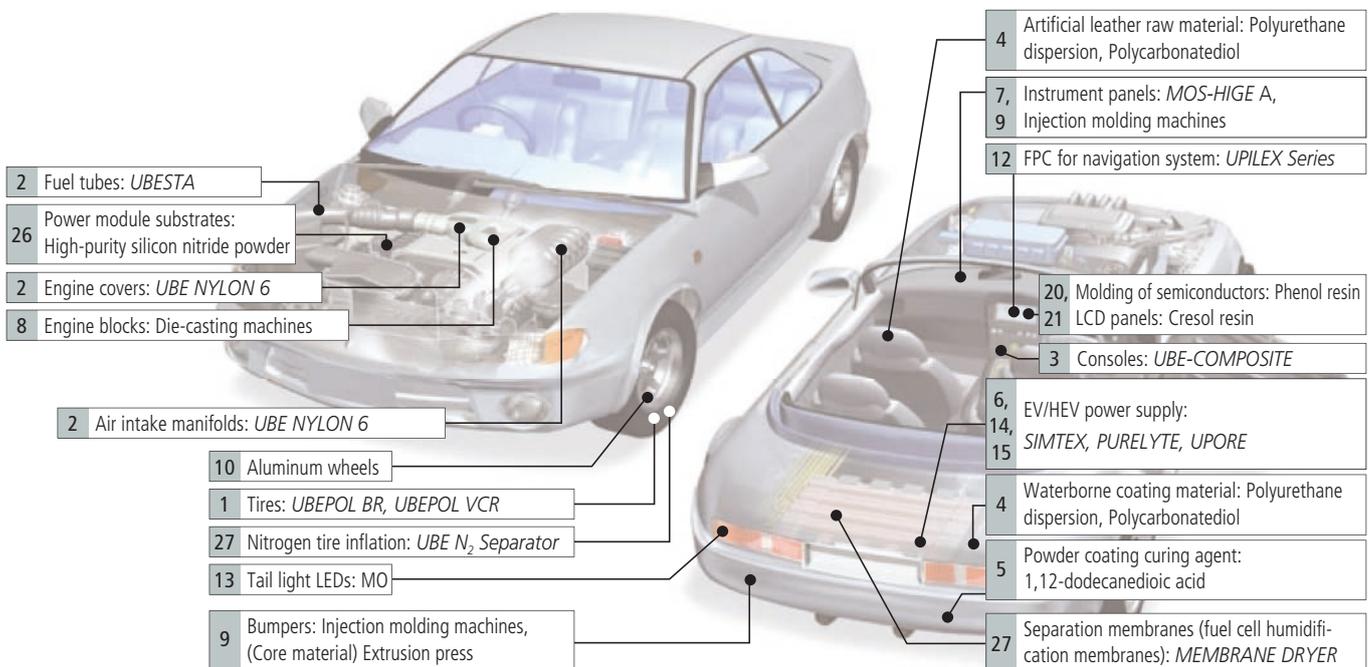
The UBE Group provides a large variety of products and technologies, ranging from those related to the automobile and information industries to those in use throughout the underlying infrastructure and daily life of modern society. The Group actively promotes projects that enable reductions in CO<sub>2</sub> 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, and their environment-friendly attributes.

## Legend: Product benefits

-  Reducing CO<sub>2</sub> 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
-  Providing environment-friendly products: Producing and using alternative products that have a positive effect on the environment
-  Contribution to health: Supporting the health of people
-  Advanced technology: New technologies that contribute to people's abundant lifestyles

## Automotive-Related Fields

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



## 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 abrasion 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  
A. Nylon 6: *UBE NYLON 6, TERPALEX*  
B. Nylon 12: *UBESTA, UBESTA XPA*  
Engineering Plastics Business Unit

A. Applications: Automotive components including air intake manifolds, product packaging film, etc.  
Features: It is the toughest 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 because of its superior oxygen gas barrier properties

B. Applications: Tubes, coating, automotive components, etc.  
Features: *UBESTA XPA* features the same basic properties as nylon, making it lightweight, with high dimensional stability and flexibility at low temperatures. The product's flexibility and transparency effectively realize characteristics that cannot be achieved by plastic or rubber alone.

★ 3    Recycle compound *UBE-COMPOSITE*  
RCP Project Promotion Group

Applications: Home appliances, automotive components, chairs, etc.  
Features: Color-adjusting recycle compound, which can change the color tint of waste plastics.

★ 4   Raw material for waterborne coating and artificial leather  
A. Polyurethane dispersion (*ETERNACOLL UW series*)  
B. Polycarbonatediol (*ETERNACOLL UH 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: Used as the primary material for high-grade polyurethane applications (waterborne coating, high-durable PU resins, and artificial leathers), which have low environmental impact.

5   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.



6



**High-strength polypropylene fiber SIMTEX**  
Ube-Nitto Kasei Co., Ltd.

Applications: Nickel-hydrogen battery separator equipped on hybrid cars  
Features: Polypropylene fibers that have undergone highly oriented crystallization through a newly adopted stretching process

### Cement & Construction Materials



7



**Basic magnesium sulfate MOS-HIGE A**  
Ube Material Industries, Ltd.

Applications: Resin filler  
Features: Helps reduce the weight of automotive PP resin components

### Machinery & Metal Products



8



**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.



9



**A. Extrusion presses**  
**B. Injection molding machines (All-electric IM)**  
Ube Machinery Corporation, Ltd.

A. Applications: Aggregate materials for car bumpers and aluminum sash for window frames  
Features: Capabilities for complex and intricate extrusion molding  
B. Applications: Molding machines for automotive and home appliance plastics, including large-screen TVs and washing machine frames  
Features: This all-electric machine can achieve substantial reduction in energy consumption compared to general hydraulic injection molding machine.



10

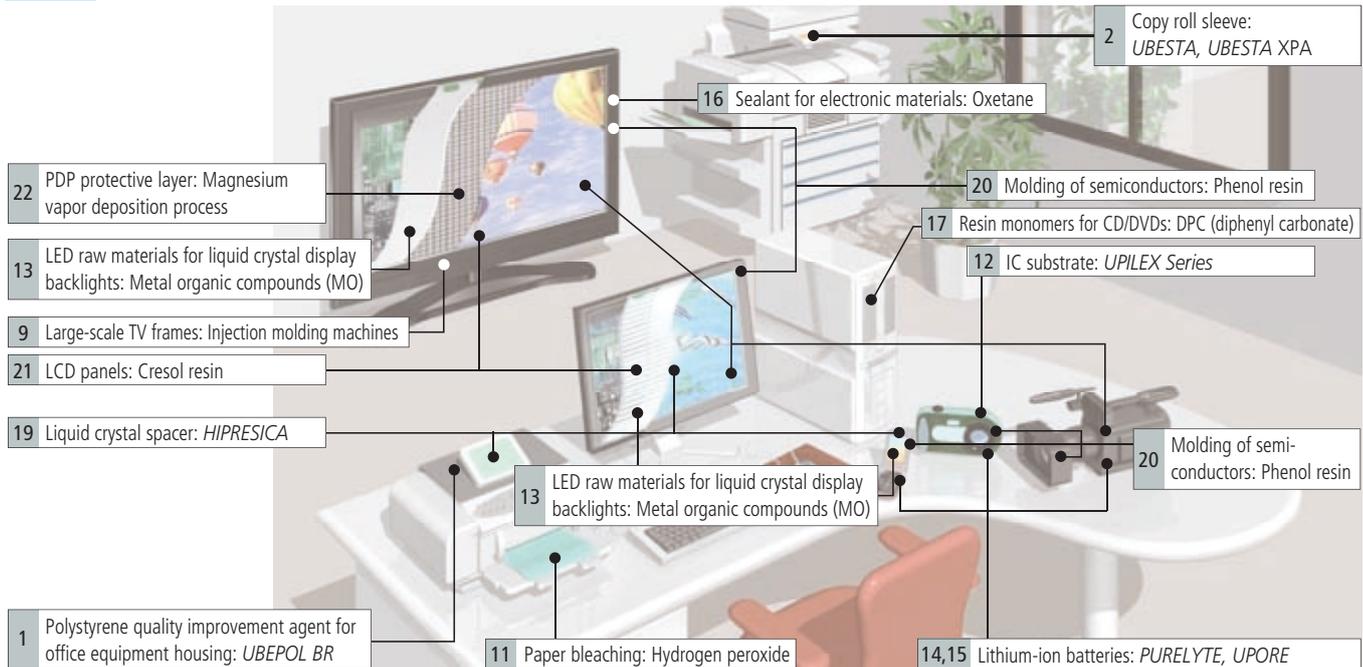


**Aluminum wheels**  
*Squeeze-cast aluminum wheels*  
UBE Aluminum Wheels Ltd.

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.

## Information, Electronics and Communications-Related Fields

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



### Chemicals

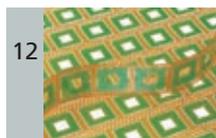


11



**Hydrogen peroxide**  
UBE-MC Hydrogen Peroxide, Ltd.

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



12



**Polyimide film UPILEX Series**  
Electronic Components & Materials Business Unit

Applications: Base material for ICs used in digital equipment, such as LCD/plasma TVs, cellular phones, and digital cameras  
Features: Well-suited for use as base material for high-resolution circuits due to its high dimensional stability with high heat resistance and rigidity



★ 13



**Metal organic compounds (MO)**  
High Purity Chemicals Business Unit

Applications: Raw material for Light-Emitting Diodes (LED)  
Features: LEDs require less electricity and lasts longer than conventional light bulbs.

★ Indicates an example of application



**Functional electrolytes for lithium-ion batteries *PURELYTE***  
Specialty Products Business Unit I

Applications: Electrolytes used in lithium-ion batteries installed in items including mobile phones and personal computers

Features: Functional electrolytes are designed to customer requirements with the combination of highly purified electrolyte and additives for controlling battery performance.



**Microporous Polyolefin Film *UPORE***  
Separator Group  
Specialty Products Business Unit II

Applications: Lithium-ion battery separators

Features: Films manufactured using a dry process that uses neither solvents nor inorganic fillers.



**Raw material for use in UV-curing coating/adhesive material *Oxetane (ETERNACOLL EHO, OXBP, OXMA, HBOX)***  
Fine Chemicals Business Unit

Applications: Sealant and adhesive for electronic materials

Features: Used as raw material for UV-curing coating/adhesive material, helping reduce VOC emissions



**A. DMC (dimethyl carbonate)  
B. DPC (diphenyl carbonate)**  
Fine Chemicals Business Unit

A. Applications: Solvent for ink, coatings, adhesives and others

Features: A solvent of low-toxicity that improves the work environment and the eco-friendly quality of printed materials

B. Applications: CDs, DVDs and other optical uses, frames for home appliances and other products, polycarbonate resin monomer used in car port roofs, expressway sound insulating boards and other products.

Features: Contributing to a safer and cleaner production process by not using the poisonous gas, phosgene, during the manufacture of polycarbonate resin



**1,6-Hexanediol**  
Fine Chemicals Business Unit

Applications: As a raw material for dry laminate adhesive for food packaging and also for UV-curing coating used in items including mobile phones.

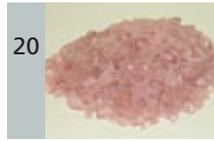
Features: Use of 1,6-Hexanediol requires no solvents, which therefore contributes to VOC reduction.



**Silica particles *HIPRESICA***  
Ube-Nitto Kasei Co., Ltd.

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.



**Phenol resin *MEH-7851***  
Meiwa Plastic Industries, Ltd.

Applications: Molding of semiconductors used in hybrid and electric vehicles, computers and cellular phones Laminates

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

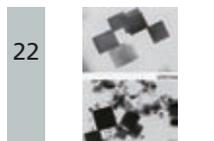


**Cresol resin *MER-7959***  
Meiwa Plastic Industries, Ltd.

Applications: The raw materials of the photoresist used for circuit formation in the LCD panels of LCD TVs, cellular phones and other products

Features: Proprietary technology is used to realize high-photoresist performance, while contributing to the increasing precision of LCD panels and low energy consumption

## Cement & Construction Materials



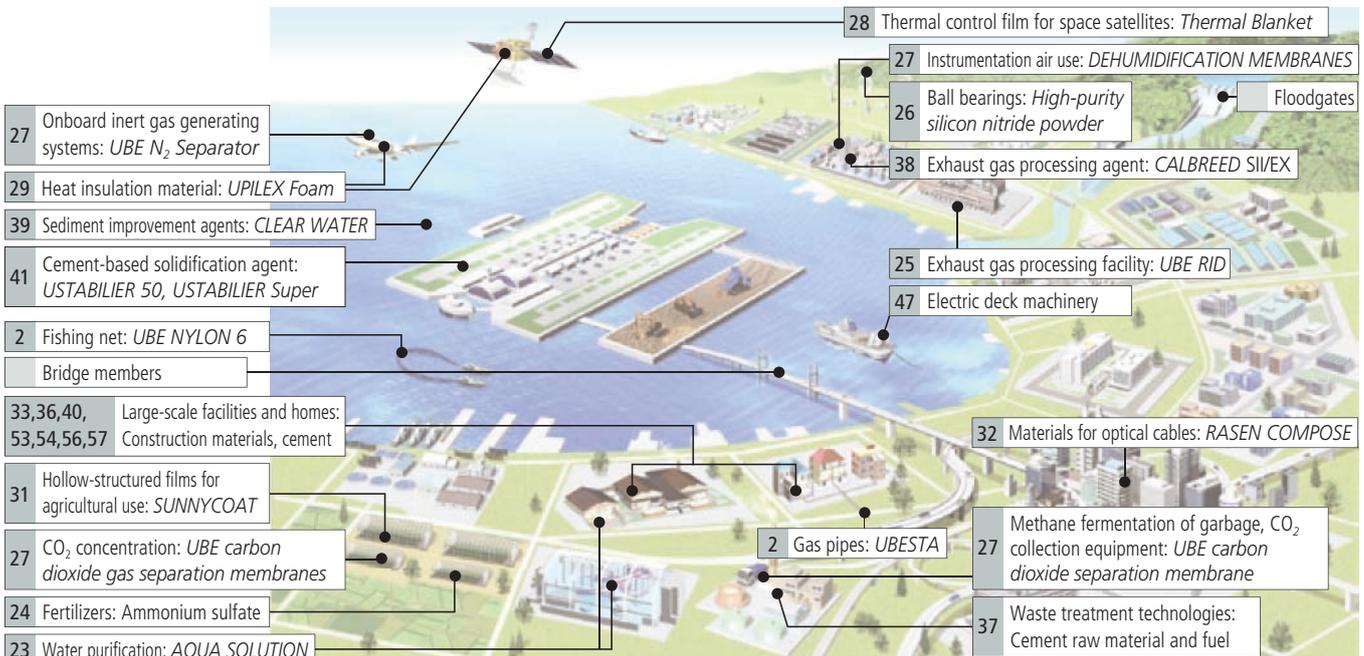
**Oxidized magnesium, a vapor-deposited, high-purity fine powder magnesia**  
*High purity & ultrafine single crystal magnesia powder*  
Ube Material Industries, Ltd.

Applications: Base material for PDP protective layers and phosphors

Features: Produced through a vapor oxide reaction that occurs when high-purity magnesium vapor combines with oxygen

# Industrial and Social Infrastructure-Related Fields

Helping to build social infrastructure based on advanced environmental technologies



## Research & Development

23    
**Photocatalytic fiber module AQUA SOLUTION**  
 Photocatalytic Products Team, Administration & Planning Department

Applications: Sterilization of bathwater, purification of plating rinse water  
 Features: Utilizing light to purify water (photocatalytic reaction). A human and environment-friendly system without chemical use

## Chemicals

24    
**A. Caprolactam**  
**B. Ammonium sulfate**  
 Caprolactam Business Unit

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

25    
**Exhaust gas processing facility UBE RID**  
 High-Purity Chemicals Business Unit

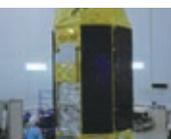
Applications: Capture exhaust emissions from semiconductor/LCD factories  
 Features: Complete capture of toxic hazardous gases/powders emitted from operations of semiconductor/liq-uid crystal factories

★ 26    
**High-purity silicon nitride powder**  
 Ceramics Group  
 Specialty Products Business Unit II

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

27    
**Separation membranes**  
**A. UBE organic solvent (alcohol) dehydration membranes**  
**B. UBE carbon dioxide gas separation membranes**  
**C. Nitrogen separation membranes (UBE N<sub>2</sub> Separator)**  
 Others: **Hydrogen separation membranes; DEHUMIDIFICATION MEMBRANES**  
 Separation Membranes Groups, Specialty Products Business Unit II

A. Applications: Bioethanol dehydration  
 Features: Effectively dehydrates azeotropic compositions. Membrane separation can increase solvent concentration to more than 99%.  
 B. Applications: Removes CO<sub>2</sub> from bio-gases (methane)  
 Features: Removes CO<sub>2</sub> from gases generated by sludge and refuse, increasing the methane concentration  
 C. Applications: Nitrogen generators for filling tires and explosion protection for mines, oil tankers, etc.  
 Features: Tire pressure is less likely to drop, increasing fuel efficiency. Explosion protection for oil fields, tankers, etc.

★ 28    
**Thermal control film Thermal Blanket**  
 Aerospace Materials Business Group  
 Picture provided by JAXA

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.

29    
**Polyimide foam UPILEX 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.

30    
**Plastic cardboard DANPLATE**  
 Ube-Nitto Kasei Co., Ltd.

Applications: Returnable boxes, delivery containers, etc.  
 Features: Heavier-duty than paper-based cardboard, plastic cardboard DANPLATE can be used repeatedly and is recyclable after use.

31    
**Hollow-structured films for agricultural use SUNNYCOAT**  
 Ube-Nitto Kasei Co., Ltd.

Applications: Agricultural greenhouse double curtains  
 Features: Exhibits heat-retention effects with superior middle air layer. Curbs energy consumption for greenhouse heating

32    
**Material for optical cables RASEN COMPOSE**  
 Ube-Nitto Kasei Co., Ltd.

Applications: RASEN 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

★ 33    
**Modified bitumen-based roofing RAM SHEET**  
 Construction Materials Sales, Construction Materials Div.

Applications: Waterproof sheet for roofing  
 Features: Self-adhesive application at normal temperatures means use of flames or solvents is generally not required.

★ 34    
**Gardening material GREENTHUMB**  
 Construction Materials Sales, Construction Materials Div.

Applications: Light artificial gardening soil  
 Features: Non-toxic, germ-free artificial soil made from perlite. Facilitates plants' growth by enhancing the airflow and water retention of the soil

★ 35    
**Sulfate-resistant mortar U-ACITECHT N**  
 Marketing, Construction Materials Div.

Applications: Cross-section restoration material (maintenance of aging sewage treatment facilities and cisterns)  
 Features: Renovates and enhances service life for existing social infrastructure

★ 36    
**Earthquake-resistant DESIGN FIT Process**  
 Marketing, Construction Materials Div.

Applications: Earthquake proofing reinforcement process  
 Features: Reinforces and upgrades schools and other existing ferroconcrete structures with steel structure earthquake-resistant bracing reinforcement process that shortens construction lead times and reduces costs.

★ Indicates an example of application



- 37 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 oil/liquid treatment facility  
 F. Facility to produce fuel from waste plastic  
 G. Biomass wood chip manufacturing facility

Material Recycle Div.

- A. Features: Capable of treating waste with high-chlorine content waste, such as incineration ash from household waste and RDF.  
 B. Features: Facility that uses sewage sludge as cement material  
 C. Features: Reduces CO<sub>2</sub> 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 at 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 process waste plastics by crushing and using as alternative 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



Exhaust gas processing agent  
**CALBREED SII/EX**  
**Sorbalit**

Ube Material Industries, Ltd.

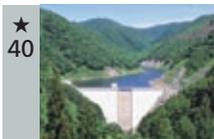
- Applications: Removal of toxic materials contained in exhaust gas  
 Features: Exhaust gas treatment agent to improve ability to absorb toxic acid gases emitted during incineration of industrial waste. Ultrahigh exhaust gas agent that features quality improvements that surpass conventional products



Sediment improvement agents **CLEAR WATER**

Ube Material Industries, Ltd.

- Applications: Purification of seawater, sediment improvement agent for farms  
 Features: Improves water and sediment quality in fish farms, enclosed water areas, etc.



Portland cement  
 Fly ash cement  
 Blast furnace slag cement

Ube-Mitsubishi Cement Corporation

- Applications: Civil engineering and construction processes  
 Features: Uses industrial waste, including sewage sludge, blast furnace slag (generated by steel manufacturers) and fly ash (generated by coal-fired power plants), as a part of raw materials and fuels



Cement-based solidification agent

- A. **USTABILIER 50**  
 B. **USTABILIER Super**

Ube-Mitsubishi Cement Corporation

- Applications: Soil stabilizing work  
 A. Features: Controls the release of hexavalent chromium from stabilized soil during construction.  
 B. Features: Controls dust generation during soil stabilizing work.

## 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.



Billets (steel ingots for rolling)

Ube Steel Co., Ltd.

- Applications: Steel material for rolling to produce shaped steel, bar steel, wire rods, etc.  
 Features: Manufactured in an electric furnace under a process that recycles steel resources. Environment-friendly, recycled product that uses scrap (main material), as well as industrial waste (e.g., waste plastics), as raw materials and fuels



Biomass-fueled water and steam boiler

**UBE Multi-Biomass Boiler**

Ube Techno Eng. Co., Ltd.

- Applications: Water and steam boiler using various types of biomass as fuel  
 Features: Boiler that can operate with a wide variety of biomass fuels, e.g. wood-type fuels (wood pellets, wood chips) and waste-type fuels (RPF, PKS and animal excrement)



Facility to improve water quality with micro-bubble ozone  
**MBO3**

Ube Techno Eng. Co., Ltd.

- Applications: Decolorization, sterilization of wastewater and reduction of sewage sludge volume  
 Features: With micro-bubble ozone, decolorizes and sterilizes wastewater and reduces the volume of sewage sludge effectively.



Kiln 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.



Electric deck machinery

Fukushima Ltd.

- Applications: Ship deck-mounted machinery  
 Features: Electric drive contributes to energy conservation



Energy-saving grab bucket

Fukushima, Ltd.

- Applications: Grab bucket used at waste disposal facilities  
 Features: Reduces CO<sub>2</sub> emissions by about 28% compared to the conventional fixed-pump type

## Energy & Environment



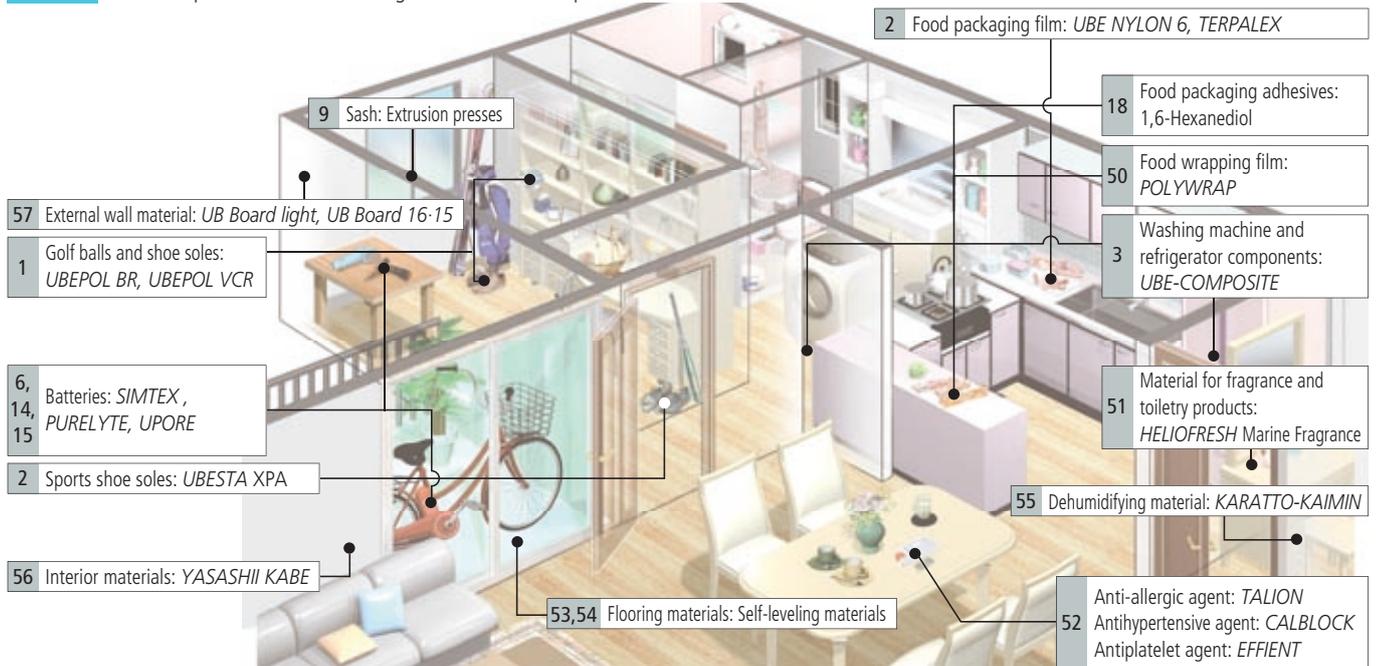
Facility to produce biomass fuel for power plants

Power Business Unit

- Applications: Dry and grind wood biomass (e.g., waste construction materials) at a dedicated grinding mill so as to use it in co-firing with coal in a pulverized coal boiler  
 Features: With a high co-firing ratio (9%, caloric base), achieves a 100,000-ton annual reduction of CO<sub>2</sub> emissions at UBE's IPP power generation plant

# Pharmaceuticals and Lifestyle-Related Fields

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



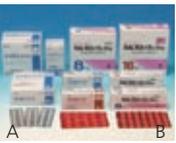
## Chemicals

**50**    **A. POLYWRAP**  
**B. Shrink film ECO SOFT**  
Ube Film, Ltd.

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.

**51**   **Material for fragrance and toiletry products: HELIOFRESH Marine Fragrance**  
Fine Chemicals Business Unit

Applications: Synthetic fragrance for use in perfumes and toiletries  
Features: As an alternative to scents made with natural ingredients, this product prevents deforestation of the Sassafras tree (a member of the Laurel family)

**52**   **A. Anti-allergic agent TALION**  
**B. Antihypertensive agent CALBLOCK**  
**C. Antiplatelet agent EFFIENT**  
Pharmaceutical Div.

 **C**

A. Applications: Medicine to alleviate allergic reactions such as hay fever  
Sales: Mitsubishi Tanabe Pharma Corporation  
B. Applications: Medicine to lower blood pressure  
Sales: Daiichi Sankyo Co., Ltd.  
C. Applications: Medicine that controls the buildup of platelets within blood vessels (coagulation of blood)  
Sales: Daiichi Sankyo Co., Ltd. and Eli Lilly and Co.

## Cement & Construction Materials

**53**  **Self-leveling materials**  
**SL FLOW G**  
**Tough Leveler G**  
**Quick Ceramic Flow**  
Construction Materials Sales, Construction Materials Div.

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.

**54**   **F☆☆☆☆ Mark-certified (formaldehyde-free) construction materials**  
**Tenba Leveler**  
**U-GROUT**  
**U-MIX**  
Construction Materials Sales, Construction Materials Div.

Applications: Plastering, flooring, and walling materials for living areas  
Features: Obtained the F☆☆☆☆ Mark certification, the most rigorous formaldehyde release standard under a voluntary labeling system in Japan Building Coating Materials Association. Being formaldehyde-free, it has no harmful effects.

**55**   **Dehumidifying material KARATTO-KAIMIN**  
Ube Material Industries, Ltd.

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.

**56**   **Healthy, humidity-conditioning building material YASASHII KABE**  
Ube Board Co., Ltd.

Applications: Interior materials for rooms with high humidity  
Features: Primarily made from natural diatomite. Capable of humidity conditioning and absorption and decomposition of VOCs that cause sick building syndrome, helping to maintain a pleasant living environment

**57**   **External wall material UB Board Light UB Board 16-15**  
Ube Board Co., Ltd.

Applications: External wall materials  
Features: A product that reuses fly ash and other industrial waste in raw materials

★ Indicates an example of application

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

## Chiba Petrochemical Factory

**Location:** 8-1 Goi Minami Kaigan, Ichihara City, Chiba Prefecture  
**Start of operations:** 1964  
**No. of employees:** 260  
**Main products:** Polyethylene, butadiene rubber, waterproofing materials, polyimide products (COF)



The Chiba Petrochemical Factory manufactures basic petrochemical products that are an integral part of our lives, including polyethylene, which is used as a synthetic rubber for producing raw material for tires, as a coating material for cables as well as in various packaging materials. While we are predisposed to maintaining safe operations, we provide products that support active lifestyles. We also operate an environment-friendly and open production facility, heeding the advice of stakeholders.

**Makoto Aikawa, Factory Manager**

## Ube Cement Factory

**Location:** 1978-2 Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1923  
**No. of employees:** 183  
**Main products:** Cement, perlite



The Ube Cement Factory functions as a manufacturing and shipping base for cement and limestone products produced in the Ube and Isa regions. At the same time, through the hard work and collaboration of our employees, we are striving to make this factory a production base for specialty cement to meet various customer needs. We constantly work to maintain an open and clean cement factory. To this end, our actions are contributing to a low-carbon society by actively using waste plastic and biomass-based energy in the manufacturing processes, while boasting a leading rate of energy efficiency in Japan. In addition, we enthusiastically encourage local residents to tour the facilities.

**Michio Maruoka, Factory Manager**

## Okinoyama Coal Center

**Location:** 1980-29 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1980  
**No. of employees:** 38  
**Main products:** Storage and distribution of coal and petroleum coke



The Okinoyama Coal Center worked to decrease its environmental impact by efficiently operating its coal storage facilities 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 and increasingly implementing health and safety, environmental preservation, and process safety and disaster prevention measures.

**Sadao Fujimoto, Center Manager**

## Ube Ammonia Industry, Ltd.

**Location:** 2575 Fujimagari, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1972  
**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-grade 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 Yoshifuji, President**

## Ube Chemical Factory

**Location:** 1978-10 Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1933  
**No. of employees:** 1,098  
**Main products:** Caprolactam, nylon resins, industrial chemicals, fine chemicals, high-purity chemicals, polyimide products, separation membranes, new materials, active pharmaceutical ingredients, intermediates



As the mother factory for the Company's chemical business, the Ube Chemical Factory gains public trust by working jointly with the local community based on the philosophy of living and prospering together. Aiming to be a factory that produces value-added products that achieve customer satisfaction, we are continuing to maintain production around the clock. Looking ahead, we plan to commence the production of new products while helping to realize an environment-friendly society by accurately responding to ongoing changes in society and the environment.

**Junichi Misumi, Executive Officer, Factory Manager**

## Isa Cement Factory

**Location:** 4768 Isa, Isa-cho, Mine City, Yamaguchi Prefecture  
**Start of operations:** 1948  
**No. of employees:** 163  
**Main products:** Cement, limestone



Located in Mine City, home of Akiyosahidai Quasi-National Park—famous for its karstic (limestone) topography—Isa Cement Factory has one of the largest cement manufacturing and limestone mining operations in Japan. Recognizing the importance of maintaining smooth communications with the local community, we located our factory and mine close to the local community. We seek to become an "eco factory trusted by the community" by paying the utmost attention to environmental protection, while participating in various local events and operating factory tours.

**Mamoru Matsuoka, Factory Manager**

## Ube Film, Ltd.

**Location:** 1020 Onoda, Sanyo-Onoda City, Yamaguchi Prefecture  
**Start of operations:** 1964  
**No. of employees:** 242  
**Main products:** Wrapping film for home use, foam cushioning material, wrapping film for commercial use



We have been providing people- and environment-friendly wrapping materials for 46 years. Along with the hard work of all of our employees, we are grateful for the understanding and cooperation of members of the local community as well as the patronage of our customers. We will continue to undertake environmental protection measures and create comfortable working conditions. At the same time, we will strive to increase corporate value and contribute to society and the local community by providing safe environment-friendly products and services that meet the demands of our stakeholders.

**Hideyo Morita, President**

## UBE-MC Hydrogen Peroxide, Ltd.

**Location:** 2575-78 Fujimagari, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1992  
**No. of employees:** 35  
**Main products:** Hydrogen peroxide



Our factory produces hydrogen peroxide, a very environmentally clean chemical. We are undertaking environmental protection measures that include reducing fuel usage through more efficient transport and lowering waste production in the manufacturing and distribution divisions by recycling and reusing materials. We are also working to create an even more open, comfortable and safer factory by engaging in communication both inside and outside the Company, to share information.

**Eiji Hashimoto, Factory Manager**

## Sakai Factory

**Location:** 3-1 Chikko Shinmachi, Nishi-ku, Sakai City, Osaka  
**Start of operations:** 1967  
**No. of employees:** 283  
**Main products:** Caprolactam, ammonia, liquefied carbon dioxide, electrolytes, separation membranes, polyimide products, recycled compounds



Our factory is located in Sakai City, which, as an environment-friendly 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. In February 2010, we started the Sakai Kita District Region Dialogue, allowing us to interact with numerous residents from the local community. Our goal is to create a facility that contributes to the local community through dialogue with local residents and cooperation with the government, while maintaining safe and secure operations.

**Kenji Yamagata, Factory Manager**

## Kanda Cement Factory

**Location:** 7 Nagahama-machi, Kanda-cho, Miyako-gun, Fukuoka Prefecture  
**Start of operations:** 1964  
**No. of employees:** 70  
**Main products:** Cement



The Kanda region's longstanding role as the industrial heartland of Kita Kyushu remains unchanged. The Kanda Cement Factory plays an important role in building a recycling-based society by operating a facility that processes waste products that are very difficult to treat, which is needed by the local community. Looking ahead, we will promote the creation of a vibrant and comfortable factory environment rooted in mutually supportive coexistence with the local community.

**Yasuhiro Kihara, Factory Manager**

## Ems-Ube, Ltd.

**Location:** 1978-96 Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1992  
**No. of employees:** 22  
**Main products:** Lauro lactam, caprolactam, ammonium sulfate



Ems-Ube is the joint company of Swiss-based EMS-CHEMIE Holding AG and Ube Industries, Ltd. Our office and facilities are located within the premises of the Ube Chemical Factory. We are Asia's sole manufacturer of lauro lactam, the raw material used in nylon 12 resin. With the goal of living and prospering together with nearby residents, all employees are working hard to improve quality-, environment- and safety-related activities and to contribute to the development of the community.

**Junichi Misumi, President**

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

**Gifu Factory**  
**Location:** 2-1-1 Yabuta-Nishi, Gifu City, Gifu Prefecture  
**Start of operations:** 1966  
**No. of employees:** 191  
**Main products:** Material for optical communication cables, high-purity silica particles, flexible copper-clad laminate, FRP products



Ube-Nitto Kasei Co., Ltd. is promoting product quality and safety, environmental protection and health- and safety-related activities through the acquisition of ISO9001, ISO14001 and OHSAS18001 certification at both its Gifu and Fukushima factories. We are placing greater emphasis on energy conservation promotion, waste reduction and the recycling of natural resources in order to preserve the irreplaceable global environment for future generations.

**Shunichiro Maniwa, President**

**Fukushima Factory**  
**Location:** 1-10 Shiojima, Fukuhara, Fukuyama-cho, Kooriyama City, Fukushima Prefecture  
**Start of operations:** 1966  
**No. of employees:** 56  
**Main products:** Conjugated fiber for hygienic materials, high-strength polypropylene fiber, reinforcement fiber for concrete, material for optical communication cables

### Meiwa Plastic Industries, Ltd.

**Location:** 1988-20 Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1946  
**No. of employees:** 139  
**Main products:** Phenol type industrial resins, polyimide resin



Based on its ISO 14001 certified management systems, Meiwa Plastic Industries, Ltd. proactively practices environmental and occupational health and safety management. We are contributing to the preservation of the global environment by developing and producing environment-friendly non-halogen/non-heavy metal and flame-retardant phenyl resin used as semiconductor sealants. In striving to live and prosper together with the local community, we are lending our support to the Yamaguchi Junior Soccer Tournament, the Ube Ekiden Relay Race and businesses related to the National Sports Festival in Yamaguchi.

**Masaaki Niigawa, President**

### Ube Material Industries, Ltd.

**Ube Factory**  
**Location:** 1985 Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1948  
**No. of employees:** 290  
**Main products:** Magnesia clinker, other raw materials for refractory, magnesium-related chemical industry products, calcium-related chemical industry products



We manufacture and sell calcia-related products made from limestone, magnesia-related products derived from sea water and fine chemical products used in electronic and optical materials. Adopting a corporate philosophy of co-existing with local communities and the environment, each factory works to preserve the environment and ensure safety and quality. In addition, we are deepening our interactions with local communities by enthusiastically participating in a variety of local events, including the Ube Festival.

**Kenichi Abe, President**

**Chiba Factory**  
**Location:** 8-2 Goi-Minami-Kaigan, Ichihara City, Chiba Prefecture  
**Start of operations:** 1974  
**No. of employees:** 102  
**Main products:** Calcia, other ceramic products, calcium-related chemical industry products

**Mine Factory**  
**Location:** 4641-1 Isa-Cho-Isa, Mine City, Yamaguchi Prefecture  
**Start of operations:** 1941  
**Site area:** 84,000 m<sup>2</sup>  
**No. of employees:** 143  
**Main products:** Calcia, other ceramic products

### Ube Board Co., Ltd.

**Ube Factory**  
**Location:** 1988-1 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1950  
**No. of employees:** 80  
**Main products:** Exterior materials (cement siding board, slate), interior materials

**Fuji Factory**  
**Location:** 704-65 Hamazoe, Gokanjima, Fuji City, Shizuoka Prefecture  
**Start of operations:** 1967  
**No. of employees:** 18  
**Main products:** Exterior materials (slate board), flooring materials



As a company that manufactures and sells construction-related products, we work to coexist in harmony with the environment by making effective use of industrial waste materials. We will continue to 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.

**Nobuhiro Kataoka, President**

### Ube Machinery Corporation, Ltd.

**Location:** 1980 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1942  
**No. of employees:** 662  
**Main products:** Die-casting machines, injection molding machines, extrusion presses, crushing machine, ceramic machine, transportation equipment, water screen equipment, bridge members, floodgates, steel structures



Further evolving our product manufacturing capabilities, which we have developed 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 continue to gain the trust and meet the expectations of customers by providing environment-friendly products and services that satisfy customers worldwide.

**Tokuhisa Okada, President**

### Ube Aluminum Wheels, Ltd.

**Location:** 2575-62 Fujimagari, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1987  
**No. of employees:** 240  
**Main products:** Aluminum car wheels



Ube Aluminum Wheels, Ltd. supplies aluminum wheels on an OEM basis to domestic automobile manufacturers. Based on the utilization of UBE's unique squeeze casting method-characterized by a high level of strength and toughness-we are able to produce attractive and lighter wheels, for which demand is accelerating, 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.

**Takeshi Mihara, President**

### Ube Steel Co., Ltd.

**Location:** 1978-19 Okinoyama, Kogushi, Ube City, Yamaguchi Prefecture  
**Start of operations:** 1989  
**No. of employees:** 256  
**Main products:** Billets, castings



We produce billets and castings mainly from scrap metal. We also dispose of and treat waste plastic, medical waste, and other industrial waste. 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 companywide activities in quality assurance, environmental management and safety control.

**Motofumi Ishii, President**

### Thailand

**UBE Chemicals (Asia) Public Co., Ltd.**  
**Location:** Rayong, Thailand  
**Start of operations:** 1996  
**No. of employees:** 532  
**Main products:** Nylon 6 resin, nylon compound, caprolactam, ammonium sulfate

**Thai Synthetic Rubbers Co., Ltd.**  
**Location:** Rayong, Thailand  
**Start of operations:** 1998  
**No. of employees:** 92  
**Main products:** Butadiene rubber



In fiscal 2009, we commenced the commercial operation of Clean Development Mechanism (CDM) Project in order to reduce the greenhouse gas, nitrous oxide (N<sub>2</sub>O). In fiscal 2010, we engage in activities such as plant tours and open-house for members of the local community, opening of UBE Community Center, and volatile organic compounds (VOC) emission monitoring and reductions. As environmental awareness increases in Thailand, we will strive to continuously expand the scope of our CSR activities and further increase the trust of the local community.

**Charunya Pichitkul, CEO**

### Spain

**Ube Corporation Europe, S.A./Ube Chemical Europe, S.A.**  
**Location:** Castellon, Spain  
**Start of operations:** 1967  
**No. of employees:** 273  
**Main products:** Caprolactam, ammonium sulfate and liquid fertilizers, polycarbonatediols, 1,5-pentanediol, 1,6-hexanediol

**Ube Engineering Plastics, S.A.**  
**Location:** Castellon, Spain (adjoining UCE)  
**Start of operations:** 2004  
**No. of employees:** 42  
**Main products:** Nylon 6 resin, copolymerized nylon



For the past several years we have been gradually switching from heavy fuel oil to natural gas to run boilers and other equipment, leading to a demonstrable reduction in CO<sub>2</sub> emissions. In terms of safety, we have established the UCE Safety Policy companywide. As a result of the collaborative efforts of cooperating companies, we were able to achieve our goal of maintaining safe operations, including zero accidents last year. In the years ahead, we will do our utmost to operate our factories in an even more environment-friendly and safe manner.

**Ricardo Lopez, CEO**

# Third-Party Verification and Opinion

In June and July 2010, UBE received third-party verification of its CSR Report from the Responsible Care Verification Center. UBE annually receives verification of the trustworthiness of its CSR Report, and it aims to further improve the quality and content of future CSR Reports by reflecting the feedback the Center provides in their verification questionnaire and their written opinion regarding the verification results.



## UBE Group CSR Report 2010 Third-Party Verification—Written Opinion

July 8, 2010

Michio Takeshita  
President & Representative Director  
Ube Industries, Ltd.

Saburo Nakata  
Chief Director  
Responsible Care Verification Center  
Japan Chemical Industry Association

### Objectives of Verification

The Responsible Care Verification Center verified the *UBE Group CSR Report 2010* (hereinafter, "the CSR Report"), created by Ube Industries, Ltd., by providing 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 used to compile numerical data reported by 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 made presentations and explanations covering the documentation used.
- The Center staff also visited the Sakai 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. Factory employees in charge of relevant business operations answered the questions of the Center staff and presented and made presentations and explanations covering the 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 Sakai 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.
  - In the calculation of performance indicators, although processes were established, it was discovered that a certain portion of these indicators were not documented. Documentation is preferred.
- 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 utilizing the special characteristics of cement production plants to accept waste from other companies and regional authorities and then work to effectively use that waste as alternative raw materials or fuel, thus contributing to a recycling society.
  - The Center recognizes the results achieved in the reduction of harmful chemical substances and emissions of greenhouse gasses.
  - The Center also positively evaluates the steady results achieved at the Sakai Factory in putting in place a single comprehensive management system that is easy to understand and efficient. This system oversees security control for various ISO and high-pressure gas certifications with regard to quality and the environment as well as safety and health.
- 4) Characteristics of the CSR Report
  - Verifying the effectiveness of universal design, the Center praises efforts made to employ easy-to-read formats and designs that take the reader into account.
  - As is appropriate for UBE, which has developed since its founding based on its corporate philosophy of living and prospering together with the local community, the Report is intended to foster exchanges between Ube and its neighboring local communities and thus contribute to society.

## Third-Party Expert Comments

The UBE Group welcomes expert comments on its CSR Report to enhance objectivity and identify new CSR challenges. We intend to reflect these opinions in future reports and take them into consideration when promoting UBE Group CSR activities.

### Anticipating Results based on Steady and Consistent Initiatives and CSR Activities that Build Bridges to the Future

Junko Nagata

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

How can corporate business activities be applied for the good of society? How, exactly, can a company obtain cooperation from a broad range of stakeholders? The answer to these questions is the very definition of CSR-focused management.

In the UBE Group's CSR Report 2010, what caught my attention were the two initiatives of "developing a CSR matrix" and "CSR meetings," both being specific examples of building a management framework that functions to weave CSR more deeply into its corporate fabric.

The development of a CSR matrix, I believe, has worked to clarify issues and identify those who take action, while CSR meetings have been extremely effective in raising awareness and promoting understanding of CSR issues among employees.

Who is it that reads the CSR Report? Of course, all stakeholders can be included in its readership, but among readers it is the employees who will prove vital. While the CSR Report is a means to communicate with those outside the UBE Group, at the same time it actually functions as an internal communication tool.

Within business processes and as each employee carries out his or her duties, just how can UBE spur them on to fulfill their social responsibility? How can social responsibility or environmental initiatives be incorporated into products or goods? These are the questions that employees—who bear the burden of CSR initiatives—deliberate, and any result that deepens understanding will be linked to CSR achievements. This is why I would definitely like to see the ongoing implementation of the CSR meetings initiative.

With regard to environmental safety, my sense was of a steady stream of achievements generated by UBE's efforts, which were consistent yet based on a variety of approaches such as attaining the majority of Responsible Care (RC) Code targets. However, process safety and disaster prevention was one RC Code

target that as of last year had still not been realized. I hope that UBE reflects on why this is so and will consider just what needs to be done about it during the next fiscal year. UBE should report not only on what was accomplished, but it should also be completely open about what was not achieved—this is a critical point from the perspective of information disclosure.

One milestone of note was the formulation of a new medium-term management plan, "Stage Up 2012—New Challenges." This plan offers UBE a clear roadmap for core business activities that will contribute to solving environmental issues, specifically through the development of technologies and products that improve the environment. Another point is CSR procurement, an initiative implemented from fiscal 2010, and one example, I believe, of deepening environmental management of the kind that only the UBE Group can achieve. The promotion of CSR throughout the supply chain, wherein even vendors consider CSR measures, demonstrates an eager stance to fulfill the responsibilities expected by society, and this trend is something I can applaud.

Looking toward the future, I wonder, for example, about how the UBE Group will be viewed by society in 2030? Indeed, what vision will Ube present over an even longer timeline? To answer this question, since the CSR Report is an introduction to a particular year's initiatives, it would help to explain in an easy-to-understand way how Ube's efforts offer bridges to the future, how the UBE Group defines itself, what it is aiming for and where it wants to go.

While being true to themselves and placing importance on the essence of UBE, I would like UBE to continue to actively disseminate information as a company that builds bridges to the future.

#### Junko Nagata

Specialist in public management (including CSR). Her wide-ranging activities include serving as a member of advisory and study panels of national and local governments as well as delivering lectures at leadership training seminars held by the Kansai Association of Corporate Executives and supporting many corporations as a CSR strategy advisor. Ms. Nagata has served as a special advisor to Toru Hashimoto, governor of Osaka Prefecture, since 2008. Her official website: <http://junko-nagata.com/>



### Response to the Third-Party Comments

We very much appreciate the valuable insights received from Ms. Nagata on this, her third occasion to contribute third-party comments. This occasion also marks the sixth year since we replaced the Responsible Care Report with the CSR Report, and just as Ms. Nagata stated earlier on, CSR represents management itself, and as the person responsible for CSR, I believe that it is becoming more and more ingrained within the Group.

Another point Ms. Nagata mentioned is evidenced by the distribution of this Report. While intended for all of our stakeholders, the largest segment to receive this Report—not quite half of the entire number of copies printed—is employees, including those employed by Group companies. We know that a major management issue is just how we can convey information in order to implement the course that management has determined. One solution was to convene briefings to explain our CSR reports. However, from this CSR report on, we have replaced these briefings with "CSR meetings" in order to have an exchange of opinions with as many employees as possible.

In addition, since 2005 we have convened "corporate briefings" where the top management of each UBE site would meet multiple times for each respective management development, and in June of this year, meetings were held on ten occasions. As one way to ensure a sense of unity and continuity among management, we will continue to implement this initiative.

Environmental safety is a topic to which we must apply our utmost efforts within the Group. However, as pointed out by Ms. Nagata, this was the second year running where, in our self-assessment, we failed to attain process safety and disaster prevention targets due to equipment accidents. Our next report will present our discussion on why we missed these targets. While we are aware that there is still room for improvement, allow me to add that as reported, work-related accidents have decreased.

We were determined to "respond to and address global environmental issues" as one of our basic policies in the new medium-term management plan, and we very much appreciate that this was so well received.

In conclusion, the advice of presenting a "vision over an even longer timeline" very much resonated with me. However, given the dramatic changes occurring around the globe, allow me to take some time to think about exactly how far we will be able to take this vision. That said, we are constantly striving to conduct future-oriented management as a going concern.

#### Kazuhiko Okada

Director in Charge of Group CSR, Vice-President and Executive Officer

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Wings of  
technology  
Spirit of  
innovation  
**UBE**



The UBE DOG was created in March 1997 as a character for the UBE Group's TV commercials.

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