# Message from the President

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# Corporate Profile

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About the cover:
The cover features photos of the employees of Libertas Ube, Ltd. and UBE’s factory support team. Taken in workplaces that allow each employee to work in his or her own way, these photos provide a glimpse of each person’s individuality.
The UBE Group Meeting Society’s Needs

Employing People with Disabilities

Working and Living, Each in Their Own Way

Special Feature 1
The UBE Group Meeting Society’s Needs
Employing People with Disabilities

Working and Living, Each in Their Own Way

Special Feature 2
The UBE Group Meeting Society’s Needs
The Cement Industry’s Contribution to the Environment and Society

Environmental Preservation through Waste Recycling and Exhaust Heat Power Generation
An estimated 6% of Japan’s population, or one in every 16 people, is a person with a disability. These include 3,930 thousand people with physical disabilities, 740 thousand with intellectual disabilities and 3,200 thousand with psychiatric disabilities, for a total of 7.87 million people.* This number is growing. In 2006, the Services and Supports for Persons with Disabilities Act came into force, spurring a shift in the overall focus from welfare to employment. In April 2016, the Act for Eliminating Discrimination against Persons with Disabilities came into effect, and in 2018 the employment of people with psychiatric disabilities will become legally mandated. The employment of people with disabilities is thus expected to further expand going forward.

UBE established Libertas Ube, Ltd. in 1991 as a special-purpose subsidiary aimed at shifting from providing care alone to providing opportunities. Yamaguchi Prefecture’s only special-purpose subsidiary, Libertas Ube currently carries out printing, digital tasks and janitorial work, using its accumulated know-how to promote the employment of people with disabilities within the UBE Group and the local community. The company aims for normalization, encouraging each individual to work and live in their own way. This section focuses on Libertas Ube and showcases the UBE Group’s initiatives in the employment of people with disabilities.

Overview of Libertas Ube, Ltd.

Name: Libertas Ube, Ltd.
Established: April 1991
Capital: ¥50 million
Representative: Yoshio Yoshimoto, President and Representative Director (appointed July 2016)
Employees: 45 (including one part-time employee) (As of April 2016)
Includes 29 persons with officially registered disabilities
Business: Printing, digital work, janitorial work
Net sales: ¥256 million (fiscal 2015)
Corporate philosophy: Our basic stance is to treat disabilities as an ordinary part of life, not special, and to not allow them to keep employees from using their abilities. Through our corporate activities, we aim to provide value and enrichment to society.
Our company name, “Libertas,” is the Latin word for “freedom,” including freedom from preconceptions, a concept reflected in our corporate philosophy.

Yoshio Yoshimoto
President and Representative Director
Libertas Ube, Ltd.
We aim to continue to be a company where all employees respect each other’s abilities and individuality, grow by working together, and, through contribution to society, can feel a sense of life and presence in the world.

Chikara Yamane
Manager, General Affairs Section
Libertas Ube, Ltd.
I find that Libertas Ube’s open atmosphere encourages everyone to speak freely, and I aim to constantly make it even more open. It is my job to promote occupational safety and health, and, as such, I constantly strive to ensure comfortable workplaces so that Libertas Ube will always be an especially bright, shining part of the UBE Group.
Four Key Concepts for the Employment of People with Disabilities

Treatings disabilities as an ordinary part of life, not special, and not allowing them to keep employees from using their abilities

Taking an honest look at the employment of people with disabilities starts with recognizing our ignorance, unease and value judgments. Liberties Ube regards disability as an aspect of diversity and works to create environments that allow people to continue working, utilizing and building on the things they can do while providing support and accommodation for the things they can’t. This stems from our belief that, even if a person has a significant disability, they can work in their own way, leveraging their strengths to play a meaningful role in society. The following is an explanation of our four key concepts for the employment of people with disabilities.

1. Disability is Only One Aspect of Individuality
Each of us has individual traits and characteristics: some of us are naturally cheerful, some are not; some are good with people, some are not. Disability is another such aspect of individuality. We assign employees to work that best matches their strengths with consideration given to the characteristics of their disability. For example, many people with intellectual disabilities find working under vague directions or on tasks that involve decision-making difficult, but are good at carrying out predetermined tasks precisely as instructed. Because this fits well with our policy of safety first, such employees are mainly involved in janitorial work, which requires strict adherence to safety protocols.

The number of people diagnosed with developmental disabilities, including autism, Asperger syndrome, and learning disabilities, is growing each year, and the number of people in Japan with some form of disability is estimated to be more than 6% of the total population. By fostering greater social understanding and acceptance, we hope to help people see a person living with a certain difficulty rather than merely a “disabled person.”

2. The Result for Two from Two
“The Result for Two from Two” refers to our belief that what matters in a combination of skills and employees is results. Take, for example, a two-employee team charged with digitizing charts and documents. One employee has a physical disability that prevents him from moving the right side of his body. This employee cannot quickly complete tasks that require both hands, but has no problem thinking through and planning the work process. The other employee has autism and an intellectual disability. While thinking through the work process is difficult for this employee, executing tasks is not, and his speed in performing visual checks is second to none. Forming teams by looking at the strengths of each person, we thus achieve the same per-person results that would be expected from persons without disabilities. Having a disability does mean having real difficulties in certain areas. Rather than trying to overcome these difficulties, we provide support and accommodation. We create teams that combine the strengths of individuals, thereby leveraging each employee’s individuality. We are highly committed to this approach.

3. Showing Consideration but Not Treating People Differently
Libertas Ube’s employees with hearing disabilities work as printing machine operators and in digital work. Those with severe hearing impairment often hear sounds with both reduced volume and distortion. Because sounds can be garbled, even a hearing aid may not help such individuals discern spoken words. With a little ingenuity, however, they can still get the job done. By, for example, using lamps to convey information visually, these employees can work as high-quality operators even with disabilities. We provide consideration and accommodation like this throughout our operations, but not, as a rule, unless the person involved requests it. We have a strict policy of not denying our employees the chance to fail. Depending on the extent of a failure, regardless of disability they may be expected to write a statement of apology, an exercise encouraging reflection and growth. We thus maintain a firm stance of not providing special treatment but providing accommodation when it is requested. For this reason, fostering an atmosphere of free and open communication is vital.

Looking Back on My Time at Libertas Ube

Libertas Ube was the 42nd special-purpose subsidiary established in Japan. As president, I firmly believed that if UBE took action, the community would follow. That was why I endeavored to help make UBE, one of the largest companies in the region, a leader in the employment of people with disabilities. When I first became president of Libertas Ube, most people in the UBE Group thought that employing people with disabilities was too difficult. Through the UBE Group Support Network for Employment of People with Disabilities, set up in 2006, we began offering training on this topic, gradually changing mindsets and advancing direct employment within the UBE Group. We reached a major turning point in 2010, with the signing of a consulting contract with UBE regarding the employment of people with disabilities.

Reforms have steadily continued. The Group established the Diversity Promotion Office in 2013 and a factory support team at the UBE Chemical factory in 2015, and has hired mental health welfare professionals. Going forward, we will need to continue changing mindsets about working together, promote consultation and support systems for providing reasonable accommodation, and conduct regular liaison meetings with key people who are helping these changes take hold. So what if someone has a disability? What is considered a disability changes over time, anyway; what matters is that we are loving and accepting. I and the employees of Libertas Ube hope to create a company that we and the larger community can all be proud of.

Shinjiro Arita
Advisor and former president of Libertas Ube, Ltd.

Calligraphy by Yuji Izumikawa, Member of the Manufacturing Group, Libertas Ube, Ltd.
4. Removal of Psychological Barriers

Our ignorance of, unease around and value judgments about people with disabilities change when we actually work alongside them. The Act for Eliminating Discrimination against Persons with Disabilities came into effect in April 2016. Under this law, companies have a legal obligation to prevent improper discriminatory behavior and to make efforts to provide reasonable accommodations. The realization of a society in which people with and without disabilities can live in harmony is the purpose of the law. This means not merely accommodating people with disabilities, but creating workplaces where the company and the employee endeavor to accommodate one another. We believe that this is what “normalization” means and that it is part of the process of removing psychological barriers. Physical accommodations cost time and money, but a spirit of understanding can be just as valuable; for example, a person in a wheelchair can go up or down a flight of stairs if others work together to carry them. We hope that this kind of consideration for others will spread.

Balancing Work, Life, and Leisure

As we make progress in promoting the hiring of people with disabilities, the next step is to ensure that they continue working. To continue working, achieving a healthy work-life balance that takes into account work, life and leisure is as important for people with disabilities as for anyone else.

In terms of “work,” to create mutually accommodative workplaces, it is absolutely necessary that both employees with disabilities and the company make a real effort. As such, careful work instructions and training are indispensable. Some of our employees have a hard time learning in the way a nondisabled employee might, simply from immersion in a situation and by listening to the conversations going on around them. To offer support in this area, we provide work-life counselors and internal job coaches as part of accommodations to help employees accomplish their work smoothly and gain a sense of achievement. We also work with a number of other organizations that provide training to improve communication skills as well as job skills training that starts with the question of what a company is. Through these measures, we aim to foster and maintain the skills necessary for employees to continue working.

We also support our work-life counselors and internal job coaches, who work closely with employees with disabilities, through the 1. UBE Group Support Network for Employment of People with Disabilities, which promotes the employment of people with disabilities throughout the Group.

1. UBE Group Support Network for Employment of People with Disabilities

In July 2006, we launched study groups for Libertas Ube, UBE’s Human Resources Department and UBE Group companies aimed at removing unease on the part of the company related to the employment of people with disabilities. About every two months, representatives of approximately 20 Group companies in the Ube district gather to visit the workplaces of people with disabilities, sit in on classes at special-needs schools, and learn about coordination with related institutions, grant systems, and other topics. These meetings have now expanded to cover UBE Group companies throughout Japan, helping participants learn practical hiring know-how through open, honest dialogue.
When it comes to “life” and “leisure,” sometimes a decline in physical strength, intellectual ability or emotional well-being may throw off the work-life balance, often manifesting as a deterioration of physical health. We depend on local governments and communities for help in such situations; the role of a company is different from that of a welfare organization. From the corporate side, we must maintain strong ties to the local government and community to build a unified, three-pronged network. I believe that this network is the infrastructure that allows our employees with disabilities to continue working.

Municipal governments throughout Japan offer support systems for people with disabilities. In Ube City, where UBE’s head office is located, various initiatives aimed at promoting hiring and improving well-being are being advanced, including 2. the Ube City Employment Support Network Meeting for the Disabled, 3. the Businesses Committee and 4. the Ube City Disabled Citizen’s Care Council. The linking of such efforts by the local government with companies is creating connections with the local community and between individuals, and these connections lead to changes in awareness. It helps us all see not “disabled people” but individual human beings, bringing us a step closer to normalization.

In these ways, Ube City maintains infrastructure to help people with disabilities continue working. However, the infrastructure necessary for people with disabilities to be able to live to the fullest in their own way their whole lives through is still far from complete. I hope that the employment of people with disabilities will serve as a catalyst to draw the attention of companies, the local government, the community and private citizens to this task.

Infrastructure Supporting Continued Working in Ube City

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2. Ube City Employment Support Network Meeting for Disabled Persons and Disability Employment Workstation

In 2007, Ube City established the Ube City Employment Support Network Meeting for the Disabled, including members from the government, support institutions, schools and companies. In 2010, we created a Disability Employment Workstation for people with disabilities within City Hall where people with intellectual, psychiatric, developmental and other disabilities do work sent by the various other divisions of the city government. Their work has gradually gathered recognition as they have contributed to the efficiency of City Hall while helping the city government staff gain a deeper understanding of people with disabilities. Going forward, Ube City will continue to promote the employment of people with disabilities throughout the city.

3. Businesses Committee

This Business Committee, of which Libertas Ube Ltd. is the center, is a body in which companies interested in hiring people with disabilities can openly discuss concerns they might have and other topics. It is a very valuable place for companies that are starting to hire disabled people, as they can learn what other companies have experienced and benefit from their advice and examples of actual initiatives. Last year, a similar committee was established in the Shunan area, following the example of this business committee. I hope that these organizations will be the heart of disabled employment in the area for years to come.

4. Ube City Disabled Citizen’s Care Council

The Ube City Disabled Citizen’s Care Council was set up in 2000 as a volunteer organization bringing together individuals from the local area across various occupations. With four sub-groups under the overall council focused on physical, intellectual and psychiatric disabilities as well as sports, the council aims to help build a community where everyone can live with peace of mind through support for children and adults with disabilities. In autumn every year we hold the Disabled Citizens’ Festival. The executive committee for this major event is made up of members of a wide range of ages. Focusing on fun, they plan and carry out the festival, making it a truly home-grown event rooted closely in the community.

At the outdoor version of the event, named “Heart of Friends,” held in Ube City’s Tokiwa Park, UBE and Libertas Ube set up a joint booth, providing an event that everyone, with or without disabilities, can enjoy.

“Heart of Friends” event organized by the Ube City Disabled Citizen’s Care Council
Aiming for 3% Employment of People with Disabilities in 2023

Yasuko Sakamoto
Manager, Diversity Promotion Office
Human Resources Dept., General Affairs & Human Resources Office, Ube Industries, Ltd.

As manager of the Diversity Promotion Office established in October 2013, Yasuko Sakamoto works to promote opportunities for diverse human resources, including women, seniors, non-Japanese nationals, and people with disabilities, and to help employees realize a healthy work-life balance.

Diversity-Related Initiatives
As one initiative to promote diversity, we are advancing the employment of people with disabilities across UBE’s offices, facilities and Group companies using the know-how and networks cultivated at Libertas Ube.

The employment of people with disabilities at UBE at first centered on the special-purpose subsidiary Libertas Ube, but in fiscal 2008, we enacted a policy of actively promoting hiring throughout UBE. Matching people with disabilities to workplaces is not easy, but, by identifying and setting aside work that is appropriate at each workplace, we have been able to make progress toward utilizing the abilities and strengths of each individual. For 2023, we have set a goal of achieving approximately a 3.0% employment level of people with disabilities. Bringing in people with disabilities has helped improve workplaces, and identifying appropriate work for them has provided an impetus for reevaluating work methods. We are promoting the employment of people with disabilities strategically, so that it will contribute to the Company’s performance.

Team Hiring and Support System
In April 2015, the Ube Chemical Factory hired three people with intellectual disabilities (including two with severe disabilities) to work as a factory support team under a veteran employee as team leader. Their diligent engagement in their work has slowly gained recognition, and they have now expanded their range of activity to include trimming greenery around the education center and factory, mending flat tires on bicycles, washing automobiles and digitizing documents. In 2015, the Tokyo Head Office also began hiring graduates of special-needs schools. These employees help with office maintenance, data entry, filing and other important functions that support business operations. We plan to use these successes as models for expanding team hiring at other Group locations.

At the same time, the UBE Group Support Network for Employment of People with Disabilities provides organizational support for work-life counselors and those in charge of hiring, who work closely with people with disabilities in coordination with Libertas Ube. We have also newly hired mental health welfare professionals, who act as liaisons between employees with disabilities and other related staff at each worksite. Coordinating with the experts at the Health Care & Support Center, these professionals aim to create more comfortable workplaces.

Short-Term Internships
The Ube Chemical factory, research facilities in the Ube District and the Tokyo Head Office accepted student interns from special-needs schools a total of 12 times in fiscal 2015 to provide real work experience. Experience working at a company provides a chance to put into practice things students have learned at school and think about employment, helping people with disabilities to live independently as part of the community in the future. We will continue to accept interns with disabilities in support of their future employment.

Percentage of Employees with Disabilities

<table>
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<th>Year</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>2.32</td>
<td>2.03</td>
<td>1.91</td>
<td>2.05</td>
<td>2.08</td>
<td>2.18</td>
<td>3.00</td>
<td></td>
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</tbody>
</table>

Target 3.00
Statutory rate 1.8%
Statutory rate 2.0%

Shifting from Providing Care to Providing Opportunities

The factory support team at UBE Chemical Factory, saying little but working in excellent coordination to fix flat tires on bicycles, an essential means of transit within the factory grounds.
Message from the President

“Creating Value”

The management philosophies of the UBE Group are “creating industries with infinite possibilities from the finite resources of coal” and “living and prospering together.” These philosophies, espoused by founder Sukesaku Watanabe, have been passed down over the Group’s 119 year history to today.

All of us at UBE take pride in these traditions. In line with our management philosophies and the Group vision, we are embracing new challenges to make the Group’s presence even stronger.

The UBE Group’s CSR

CSR refers to a company’s duty to operate in a way that fulfills its role as a member of society. To be in a position to do so, it is key for the UBE Group to achieve sustainable growth and development. A company that does not grow sustainably cannot serve its stakeholders. In other words, the foundation of CSR is the balanced return to stakeholders of the fruits of sustainable growth.

Companies serve a wide range of stakeholders, each of whom present different demands and expectations. I believe that sustaining growth is essential to meeting stakeholder expectations, as is being the type of company that shareholders can picture continuing to grow in the future.

UBE Group New Medium-Term Management Plan

“Change & Challenge 2018”

<table>
<thead>
<tr>
<th>Key Figures</th>
<th>Operating income</th>
<th>¥50.0 billion</th>
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<td></td>
<td>Ordinary income</td>
<td>¥49.0 billion</td>
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<tr>
<td>Key Indicators</td>
<td>Return on sales</td>
<td>6.5% or above</td>
</tr>
<tr>
<td></td>
<td>Return on equity</td>
<td>9.0% or above</td>
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</tbody>
</table>

Yuzuru Yamamoto
Ube Industries, Ltd. President and Group CEO, Representative Director
In particular, it is important to be “an enterprise that continues to create value for customers,” which is what we want to become in ten years as laid out under our new medium-term management plan. I believe that being consistently recognized as valuable by customers leads eventually to being recognized as such by society at large.

Diversifying our human resources is essential to the achievement of sustainable growth. To this end, we are striving to change how we approach work in order to ensure healthful, comfortable workplaces that allow the diverse human resources that support the UBE Group to use their respective abilities to the fullest, regardless of gender, nationality, age or other such factors. We aim to be a company where all employees can find meaningful opportunities and succeed.

At the same time, a company is a member of the local community in which it is situated, and social contribution activities that benefit community development are an important part of CSR activities. It is important to think seriously about what kinds of activities make sense for us and will be useful to local communities, and then to systematically implement those activities. The UBE Group maintains manufacturing bases across Japan and around the world, and this policy is the same everywhere it operates. Growing in vitality along with local communities through the consistent application of this approach is what “living and prospering together” is all about.

The New Medium-Term Management Plan

We launched a new medium-term management plan at the beginning of fiscal 2016 (ending March 31, 2017). Based on our management philosophies, it includes a vision of what we want to become in 10 years and serves as an action plan for achieving this vision. The plan’s two basic management strategies are to strengthen the business foundation to enable sustainable growth and to address and be part of the solution for resource, energy, and global environmental issues.

The plan also positions environment and energy, mobility, construction and infrastructure and healthcare as target business domains going forward. We will work to quickly expand existing businesses and business in adjacent areas while also fostering new businesses.

The UBE Group will mark its 120th anniversary in 2017. The Group, which began with coal mining in Ube, Yamaguchi Prefecture, has consistently moved forward under the philosophy of “living and prospering together” with local communities. To do so sustainably, it has constantly exercised its ingenuity to create industries with infinite possibilities from the finite potential of the coal mining business.

Since our founding, we have advanced under the philosophy of “creating industries with infinite possibilities from the finite resources of coal.” A frontier spirit and constant technological innovation as well as the continuous creation of next-generation value through product manufacturing have been the driving forces behind this progress. Our Group vision, “Wings of technology and spirit of innovation. That’s our DNA driving our global success” is another way of expressing this philosophy.

In line with the launch of the medium-term management plan, we have announced a vision of what we want to become in 10 years.

What we want to become in 10 years

An enterprise that continues to create value for customers

The UBE Group will have a positive social impact as a corporate entity with a presence in expanding business domains by developing products and services that anticipate market needs.

The goal of creating value has been part of the UBE Group’s approach since long before the new plan. Moreover, “value” refers to not just tangible indications of worth, but includes such intangibles as the provision of services and solutions. Aiming always for this goal, all members of the UBE Group will maintain a strong awareness of this approach, sharing it widely along with our management philosophies and Group vision.

August 2016

Yuzuru Yamamoto
Ube Industries, Ltd. President and Group CEO, Representative Director

Management Strategies

1) Strengthen the business foundation to enable sustainable growth
- The UBE Group will focus on the profit margin for each business division and improve the profitability of existing products through painstaking cost reductions.
- Under a business strategy emphasizing consolidated cash flow, the UBE Group will carry out investment to support growth while ensuring that it will also reap the fruits of investment projects.
- The UBE Group will improve its ability to respond quickly to changes in the global business environment by expanding its network of business offices overseas and deepening coordination among Group companies in Japan and overseas.
- To the revitalize and achieve further growth in the chemicals segment, the UBE Group will aim to achieve the recovery of the segment’s operating income to ¥20 billion or more before the end of the final year of the new medium-term management plan in order to be at a solid starting point for the next growth stage.

2) Address and be part of the solution for resource, energy, and global environmental issues
- The UBE Group actively pursues initiatives for realizing a sustainable society. In particular, the UBE Group will promote a reduction in greenhouse gases through the reduction of energy consumption and the expansion of waste recycling throughout the supply chain, while ensuring overall profitability. It will also promote the creation and expansion of technologies and products to contribute to, among other things, a reduction in environmental load.
- FY2021 target: 15% reduction in greenhouse gas (as compared with FY2005)
Corporate Profile

Corporate Information
Company Name: Ube Industries, Ltd.
Head Office: Tokyo Head Office
Seavans North Bldg., 1-2-1, Shibaura, Minato-ku, Tokyo 105-8449, Japan
Ube Head Office
1978-96, Kogushi, Ube, Yamaguchi 755-8633, Japan

Founded: June 1, 1897
Consolidated: March 10, 1942
President and Group CEO: Yuzuru Yamamoto
Capital: ¥58.4 billion (as of March 31, 2016)
No. of Employees: 10,764 consolidated;
3,693 unconsolidated (as of March 31, 2016)

Business Profile
The history of the UBE Group stretches back more than a century. Since beginning coal mining operations in Ube, Yamaguchi Prefecture, we have adapted to social and industrial change, continually innovating and evolving. Through all this, certain values at UBE—technology and innovation—have never changed.

Today, UBE is active around the world. We pursue business based on product manufacturing backed by innovative technologies and an entrepreneurial spirit that anticipates evolving needs and embraces change. These values are etched deeply into the entire Group and continue to be passed down.

The UBE Group’s current businesses are centered on chemistry and include the fields of pharmaceuticals, cement and construction materials, machinery, and energy and the environment. UBE’s products and technologies in these fields are used in a wide variety of applications, from those close at hand, including home appliances, household goods, automotive components and pharmaceuticals, to such areas as infrastructure and state-of-the-art aerospace applications.

Segments

Chemicals
UBE manufactures nylon resins widely used in packaging materials and automotive components as well as caprolactam, a material used to make nylon resins. Operating globally, UBE produces both types of products in three regions.
UBE’s polybutadiene rubber is used by some of the world’s top tire manufacturers and enjoys a strong reputation.
Ammonia and various other industrial chemicals as well as ABS resin and polyethylene for general-use plastics support industry and modern lifestyles in a wide variety of applications.

Pharmaceutical
UBE began pharmaceutical R&D in the 1980s, building on its abundant organic synthesis technologies nurtured in other businesses. Today, UBE partakes in drug discovery, developing active pharmaceutical ingredients in-house and in collaboration with other pharmaceutical manufacturers, as well as the contract manufacturing of active ingredients and intermediates, in which the Company undertakes production process development and manufacturing on behalf of pharmaceutical companies. These two areas are the pillars of UBE’s pharmaceutical business.

UBE’s specialty chemicals and products lineup includes lithium-ion battery electrolytes and separators, circuit substrates for flat-screen displays, heat-resistant polyimide resin for use in aerospace and other advanced materials as well as a large number of environment-friendly products, such as high-performance coatings and fragrance materials. UBE’s silicon nitride for use in bearings for wind power and other applications and explosion-proof nitrogen separation membranes are used worldwide.
The UBE Group’s technical strengths are demonstrated by the high-value-added materials and products its unique technologies make possible.
Business Bases in Japan and Overseas

The UBE Group meets a wide range of needs in the areas of civil engineering and construction with its extensive product lineup and by constantly introducing new products with excellent functions, further expanding its reputation for reliability.

Ube-Mitsubishi Cement Corporation provides a stable supply of UBE brand cement throughout Japan. From ordinary cement to specialty cement and stabilization agents, the broad spectrum of trusted UBE brand cement products supports the formation of infrastructure.

UBE's cement factories accept various waste materials, including waste plastic and sewage sludge, for reuse as fuel. UBE also boasts an extensive lineup of construction materials. In recent years, the Group’s seismic retrofitting technologies have been widely adopted in schools and other buildings.

Cement & Construction Materials

Machinery

UBE brand molding machines and industrial machinery, including die-casting machines, injection molding machines and extrusion presses, enjoy an excellent reputation in the global market. UBE supplies die-casting machines primarily to the automotive industry in and outside Japan, and boasts a particularly outstanding global track record in large machines. The Company also has an industry-leading lineup of injection molding machines with mold clamping force ranging from 650 tons to 3,000 tons, among the strongest in the world.

By strengthening and enhancing the linkage of products and services, UBE is reinforcing its ability to meet the needs of customers in the global market while expanding its network of locations to emerging nations that promise growth, such as India and Mexico.

Energy & Environment

In addition to the UBE Group’s overall energy infrastructure, which includes coal-related businesses that provide a stable supply of imported coal and the supply of electricity from in-house power stations, the Group operates new energy businesses, such as the independent power producer (IPP) business and solar power (megasolar) business.

UBE’s annual coal handling capacity is approximately seven million tons. The Okinoyama Coal Center in Ube City is one of Japan’s largest. UBE stores coal at the center. From there, it distributes coal to users throughout the country.

Furthermore, the UBE Group is actively engaged in the development of new biomass fuels, which are promising for their potential to reduce greenhouse gas emissions.
The UBE Group’s Corporate Philosophy and CSR

This is UBE’s founding philosophy and core CSR concept and has been passed down for over 119 years.

The Spirit of “Living and Prospering Together”

Promoting the Management Philosophy “Living and Prospering Together” to Create Ideal Local Communities

Sukesaku Watanabe, the founder of UBE Kosan, was a businessman who loved his hometown. Strongly believing in the importance of maintaining close links with local communities while pursuing business development, Watanabe undertook various initiatives to upgrade the civil and social infrastructure of the region. Such initiatives included establishing an electric company that provided the region’s first electric lighting, constructing water supply facilities and railroads, and setting up schools to foster the development of human resources. Sukesaku Watanabe’s favorite phrase, “living and prospering together with the local community,” forms the basis of the UBE Group’s CSR activities.

Promoting the Management Philosophy “Creating Industries with Infinite Possibilities from the Finite Resources of Coal” to Foster a Frontier Spirit

Anticipating a future in which there would be no coal left to mine, Watanabe espoused the philosophy of “creating industries with infinite possibilities from the finite resources of coal” in order to ensure the continuing prosperity of local communities. Consequently, he focused his efforts on making the transition from the coal mining industry to new, developing industries. In particular, Sukesaku Watanabe had the foresight to use soil removed from mines to create waterfront landfills that could serve as industrial sites. In addition, he established harbor jetties and railroads while opening steel, cement and chemical factories. Such facilities form the foundation of the present UBE Group. In line with Watanabe’s philosophy of taking on new business challenges, UBE cultivates a corporate culture that encourages a spirit of challenge that fosters a frontier spirit in every employee.

These two founding philosophies are the starting point of the UBE Group’s CSR, and, having been handed down since the Company’s founding, are now our Management Philosophies.

Group Vision:

Wings of Technology and Spirit of Innovation

This is the heritage driving our global success. The UBE Group will embrace a frontier spirit in seeking to achieve coexistence with the global community driven by the limitless possibilities of technology, while continuing to create value for the next generation through product manufacturing.

The UBE corporate philosophy, “living and prospering together,” and a spirit of unremitting self-reform comprise the UBE Group vision. This Group vision is being passed along to every employee. The UBE Group’s strengths lie in business activities centered on product manufacturing through the use of original technology as well as a proactive approach that meets the needs of the age. Expanding these strengths worldwide, we will work to realize sustainable development around the globe with the aim of achieving global coexistence.

The UBE Group works to achieve sustainable business and social development by positioning its Basic CSR Policies (see page 15) at the center of its business activities. In so doing, we are fulfilling our responsibility to maintain coexistence between business and society. In addition, we adhere to the UBE Action Guidelines (see page 16) in order to realize proactive CSR activities and, in turn, attain the trust of all stakeholders.
Expanding the Scope of Living and Prospering Together
That is the UBE Group’s CSR.

The concentric circles and outward pointing arrows of this diagram convey the concept of globally expanding the scope of living and prospering together, UBE’s management philosophy, through problem solving using the CSR matrix.*

In the center ring are the five stakeholder categories and UBE’s mission with regard to each.

To address the six CSR issues of concern to stakeholders, the UBE Group always conducts fair business activities and works to deepen stakeholder confidence through regular dialogue.

UBE believes that the organic operation of these separate CSR activities will contribute to enhancing corporate value, sustainable growth and harmonious global coexistence.

* CSR matrix: A table that clearly lays out the CSR issues, broken down by stakeholder, for each UBE Group executive and employee to address.
**UBE Group Basic CSR Policies**

- Continuously improve profits and earnings and maintain a sound financial position in order to increase corporate value
- Produce 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

**CSR Promotion Initiatives**

CSR is an approach to corporate management that defines such management as a company's actions to fulfill its role as a member of society.

The UBE Group's CSR activities encompass increasing the Group's corporate value and purpose; ensuring sustainable growth; deepening the confidence of stakeholders and broadly working to coexist harmoniously with society through day-to-day dialogue with its stakeholders; and globally expanding the scope of "growing and prospering together," the Company's founding philosophy (our management philosophy), through business activities going forward.

**Group CSR Committee**

CSR activities are promoted by the Group CSR Committee, which is composed of members of the Group Strategic Management Committee and chaired by the Group's CEO. In line with the Group's Basic CSR Policies, the Group CSR Committee makes decisions on and revises important matters related to CSR activities and assesses the results of the Group's CSR-related activities.

Under the Group CSR Committee are six specialized committees, namely the Compliance Committee, the Competition Law Compliance Committee, the Information Security Committee, the Restricted Cargo and Export Management Committee, the Crisis Management Committee and the CSR Promotion Committee. Each of these undertakes deliberations, reporting and revisions related to concrete action plans based on the CSR matrix.

**Breakdown of Spending on Social Contribution Activities in Fiscal 2015**

- Open facilities (4.4%)
- Payments in kind (3.0%)
- Participation by employees (42.2%)
- Monetary donations (43.6%)
- Other (6.6%)

FY Total ¥280 million

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**UBE Group CSR Report 2016**

15
Chapter 1 Corporate Mission and Social Responsibility
We will strive to create new value and achieve sustainable growth as a corporation while actively fulfilling our corporate social responsibilities to contribute to the sound growth of society.

Chapter 2 UBE Group and the Law
We will comply with applicable legislation and our company regulations, conducting ourselves as a member of a sound society. We will refrain from any ties or transactions with antisocial forces, and will not bow to the unreasonable demands of antisocial forces.

Chapter 3 Business Activities and Creating Value
We will develop and supply technologies, products and services that are safe and serve useful purposes, in order to earn the confidence of the public.

Chapter 4 Fairness and Integrity
We will strive to promote fair and open competition while executing our work with integrity as we pursue our business activities both at home and abroad.

Chapter 5 Safety and the Environment
We are committed to safety, and will actively and voluntarily implement initiatives to conserve the global environment as an issue facing all humankind.

Chapter 6 UBE Group and Human Rights
We will respect human rights and create healthy and positive workplaces that are comfortable to work in, as we pursue our business activities both at home and abroad.

Chapter 7 UBE Group and Information
We will strive to protect information and engage in appropriate disclosure of corporate information, while actively and thoroughly facilitating communication with society.

Chapter 8 UBE Group and the International Community
We will contribute to the growth of the regions we are involved in, as a member of the international community.

Chapter 9 Summary: Building a Firm Foundation of Corporate Ethics
We will build a firm foundation of corporate ethics, based on the UBE Action Guidelines and through close cooperation within the UBE Group and with our business partners.

Revised March 2015

UBE Action Guidelines (See page 42)
UBE has established the UBE Action Guidelines as a code of conduct that embodies the philosophy of “living and prospering together” to guide the Group to engage in business activities in line with relevant laws around the world, the Company’s internal rules, and social mores.

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Revised March 2015

Relationships with Stakeholders
UBE identifies five types of stakeholders with whom it maintains deep relationships. In the course of achieving sustainable growth, the Group actively strives to fulfill its corporate social responsibilities with regard to these stakeholders.

The UBE Group will continue to value engagement with stakeholders as it implements CSR activities and works to coexist harmoniously with society.

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>UBE’s Mission</th>
<th>Main Means of Engagement</th>
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<tbody>
<tr>
<td>Customers</td>
<td>Provide safe, high-quality products and services that are useful to society at fair prices and swiftly react to customer needs</td>
<td>Communication through sales activities and providing information by various means (including the UBE website and product catalogs)</td>
</tr>
<tr>
<td>Suppliers</td>
<td>Engage in fair, honest transactions</td>
<td>Communication through purchasing activities</td>
</tr>
<tr>
<td>Employees</td>
<td>Provide fair pay and stable employment, develop human resources, share information and tasks, and support improvement in quality of life</td>
<td>Corporate briefings, the Central Labor-Management Conference, training, reporting and counseling systems, internal publications and the Company intranet</td>
</tr>
<tr>
<td>Local communities and governments</td>
<td>Provide stable, fair employment, pay taxes appropriately, and engage in dialogue with local communities and society</td>
<td>Regional dialogue meetings, the local newsletter “Tsubasa,” the CSR Report and charity concerts</td>
</tr>
<tr>
<td>Shareholders</td>
<td>Continuously raise corporate value, provide appropriate information disclosure, and pay stable, appropriate dividends</td>
<td>IR activities (results briefings, investor briefings, facility tours, etc.), the General Meeting of Shareholders, and providing information by various means (the UBE website, the Annual Report and the UBE Business Report)</td>
</tr>
</tbody>
</table>
Initiatives to Establish and Maintain Corporate Governance

The UBE Group’s basic mission is to promote sustainable growth and increase corporate value over the medium to long term for the entire Group. To that end, we believe that we must establish and maintain effective corporate governance in order to sustainably conduct proper business activities and thereby fulfill our duties toward and earn the trust of all the Group’s stakeholders, including shareholders, suppliers, employees and local communities.

Board of Directors

To bring a third-party perspective to decision making, thereby ensuring efficiency, transparency and objectivity in management, four of the eight corporate directors that make up the Board of Directors are appointed from outside the Company. Furthermore, 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. Both committees comprise five directors and are chaired by outside directors.

Audit System

UBE has a Board of Corporate Auditors. Together with the Board of Directors, this board works to enhance the supervision of management and ensure management fairness and transparency.

The Board of Corporate Auditors 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 and offering their views at important meetings, including meetings of the Board of Directors, by examining important approval documents and by receiving reports on operations from directors and other officers.

The corporate auditors also regularly meet with the independent auditors to hear about their auditing plans and the status of their implementation. In addition, corporate auditors work to maintain effective communication with the internal auditing departments and the corporate auditors of Group companies through regular exchanges of information.

At UBE, internal audits are conducted by the Auditing Department, which reports directly to the President as an independent organization. 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. The Auditing Department and the corporate auditors regularly exchange information and work in close cooperation with each other; for example, when the auditors conduct audits, some of the Auditing Department staff may accompany and support them as required. As a member of Companywide risk management organizations, such as the Compliance Committee, the head of the Auditing Department collaborates with each committee and works to strengthen risk management systems.

Executive Officer System

In June 2001, UBE adopted an executive officer system with the aim of separating governance and management functions. As of June 2016, the Group has 23 executive officers, of whom three are also directors. Executive officers carry out business operations in accordance with management policies determined by the Board of Directors, exercising the authority delegated to them by the President and Representative Director.

To realize flexible personnel matters with regard to officers and fully enforce a performance-related rewards system, director and executive officer terms of service are set at one year.

Corporate Governance Structure

Decision-Making System

- Board of Directors
  On behalf of shareholders, the Board of Directors discusses and makes decisions on the issues provided for by the Companies Act, the basic policies of the Company and important executive 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.
**Risk Management Systems**

The UBE Group is developing and reinforcing its risk management systems so that it can identify and assess the probability and impact of risks that might prevent the attainment of its business objectives and implement appropriate risk countermeasures.

To promote environmental safety and product safety, we have established the UBE Group Environment and Safety Committee and the UBE Group Product Safety Committee, which formulate policy for the entire Group and implement various related measures. In addition, the Group has established the following committees to deal with individual risk categories.

**Information Security Committee**

Due to the digitization of a wide range of information, companies are facing risks of information leakage, falsification and loss, and these risks can have a serious influence on their corporate activities.

In 2002, the UBE Group established the Information Security System, and the Information Security Committee. The committee formulates basic policy and rules regarding information security, implementing measures based on extensive discussions of security management. As one measure to address new risks in everyday operations, we conduct data center disaster drills based on particular types of disaster and yearly information security training for all Group employees, thus providing opportunities to learn about the latest information security measures. In fiscal 2015, we revised our system for protecting trade secrets and worked to respond to such developments as the Personal Information Protection Law (the “My Number” system) and Basic Law on Cybersecurity. In fiscal 2016, we plan to strengthen security systems at overseas Group companies and are working to ensure information security throughout the UBE Group.

**Crisis Management Committee**

The UBE Group has established the Crisis Management Committee to discuss and make decisions regarding basic matters related to the handling of unforeseen circumstances that could seriously impact the Group’s businesses. The committee maintains the Group crisis management regulations and crisis management manual and determines yearly tasks to address. In fiscal 2015, the committee addressed the key tasks of natural disaster response, infectious disease response, Companywide response to disaster at a factory, and BCM improvement.

Moreover, the Overseas Crisis Management Committee has been established within the Crisis Management Committee to examine crisis management for employees who are on business trips or stationed overseas and family members who are stationed with them.

**Business Continuity Framework: BCP** and BCM

The UBE Group strives to minimize the impact of unexpected events on its businesses and on stakeholders. Specifically, the Group has established a business continuity plan (BCP) and implements activities aimed at increasing its ability to sustain business operations as well as business continuity management (BCM).

In terms of preparedness for a major earthquake directly under the Tokyo metropolitan area or the Nankai Trough, every year we inspect and review the BCP, conduct field drills at relevant business sites and hold disaster response BCP briefings to promote the sharing of the BCP.

Furthermore, the Group formulates and implements measures to reduce the impact of natural disasters on factories and facilities, mainly through the Group Earthquake Countermeasures Committee (see page 27).

To prepare for outbreaks of infectious disease, we have created a Group manual for responding to future outbreaks of new influenza strains in line with Japan’s Special Measures Act to Counter New Types of Influenza Governmental Action Plan and the accompanying guidelines. Based on the policies laid out in this manual, we promote measures to be taken under ordinary circumstances, conduct periodic drills based on outbreak scenarios and regularly inspect and revise the BCP for specific offices and facilities as well as the Group as a whole.

Furthermore, given the potential for enormous impact that disasters at factories (such as a fire or explosion) pose, we are developing a Companywide response structure for dealing with such disasters and carry out media training as part of comprehensive disaster drills at each factory.

Furthermore, to respond to recent changes in approaches and methods related to the BCP and BCM, since the latter half of fiscal 2015 we have been considering ways to improve our BCP. In particular, in addition to our previous drills, which improved readiness with regard to certain types of responses, we are working to add workshops and simulation drills to make drills more comprehensive and immersive. By doing so, we aim to minimize the possibility of encountering situations that we have not prepared for.

**Main Risk Response Drills in Fiscal 2015**

- **Disaster response drills**: 3 times
- **Disaster response BCP briefings**: 10 times
- **Media training**: 3 times
- **Data center disaster drills**: 3 times

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*1. BCP (business continuity plan): A plan, including policy, systems and procedures, devised to prevent the suspension of principal businesses in the event of unexpected events and, should businesses be suspended, recover their functions as quickly as possible.

*2. BCM (business continuity management): Management designed to promote the ongoing improvement of an enterprise’s ability to sustain operations through the formulation of BCPs, the regular implementation of education and drills, and the verification, evaluation and revision of such BCPs, education and drills.
Human Rights and Labor Practices

Respect for Human Rights
In its Action Guidelines for Business Conduct, the UBE Group has stated that it will respect human rights and develop healthy, bright and motivating workplaces. We regard respect for human rights as a fundamental rule guiding the corporate activities of the UBE Group.

Ideal Personnel
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.

Personnel System
UBE has introduced an evaluation system that incorporates a goal management system and a performance-based component. By organically linking the 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.

The Interconnecting Aims of Each System

<table>
<thead>
<tr>
<th>System</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification System</td>
<td>Courses are divided by expected role and qualitative differences in positions</td>
</tr>
<tr>
<td>Development System</td>
<td>Training professionals who will generate profit</td>
</tr>
<tr>
<td>Evaluation System</td>
<td>Results and expertise evaluations</td>
</tr>
<tr>
<td>Compensation System</td>
<td>Compensation that stresses results and ability</td>
</tr>
</tbody>
</table>

Human Resource Development Initiatives
In order to develop superior human resources, we work to enhance the following key areas: 1) on-the-job training (OJT); 2) off-the-job training (workshops, etc.); and 3) self-improvement support programs. At the same time, we maintain support systems so that all UBE employees can fully exercise their abilities in carrying out their work. Specifically, to assist in employee career development, every year employees prepare Career Development Sheets. Opportunities are provided for interviews about their careers with their superiors using these sheets, and employees are rotated through various posts to enable them to gain a broad perspective and expand their areas of expertise. Furthermore, UBE updates the content of off-the-job training, consisting mainly of workshops, based on changes in the external environment.

Strengthening Global Human Resource Development
Given that overseas business development is expected to expand going forward, UBE is actively fostering globally capable human resources. The key points of these efforts are 1) raising the level of language abilities 2) enhancing opportunities for overseas experience 3) reinforcing cultural sensitivity, and 4) cultivating global business leaders. Based on these points, we are conducting various types of global training to increase awareness and ambition among employees with regard to foreign languages and global business.

In addition, human resource managers from Thailand, Spain and Japan gather at the Group’s annual Global Human Resources Meeting to exchange information on human resource development and personnel systems. Furthermore, by reviewing personnel and evaluation systems, we are responding to globalization on the human resources front. In fiscal 2014, we established a set of human resource principles for the entire UBE Group to clearly state our Groupwide approaches to human resource management and promote the sharing of relevant values across the global UBE Group.

We are also actively promoting personnel exchanges with overseas UBE Group companies. Through joint training, exchanges and dispatches to Japan of young employees, we provide Group employees with real work experience in other countries, helping to cultivate global mindsets.

Diversity Initiatives
UBE positions diversity as a key management strategy. We are working to create a corporate culture that respects diverse individuality and values and abounds with creativity and ambition.

In October 2013, we established the Diversity Promotion Office within the Human Resources Department as a dedicated unit that promotes the diversity of human resources and working styles.
Human Resource Diversity Initiatives

UBE recruits and hires people across a wide range of fields, regardless of personal history, nationality, gender and other such factors, striving to create workplace environments where all employees can utilize their individual abilities and succeed.

UBE Employee Data (as of March 31, 2016)

<table>
<thead>
<tr>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees (% of total)</td>
<td>3,446 (93.3%)</td>
<td>247 (6.7%)</td>
<td>3,693 (100.0%)</td>
</tr>
<tr>
<td>Number of Managers (% of total)</td>
<td>938 (98.9%)</td>
<td>10 (1.1%)</td>
<td>948 (100.0%)</td>
</tr>
<tr>
<td>Average Age</td>
<td>41.7</td>
<td>40.1</td>
<td>41.6</td>
</tr>
<tr>
<td>Average Number of Years at UBE</td>
<td>15.9</td>
<td>15.5</td>
<td>15.9</td>
</tr>
</tbody>
</table>

Hiring Breakdown (Number of People)

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>New graduate hires (generalist positions)</td>
<td>54 (10)</td>
<td>50 (7)</td>
<td>46 (12)</td>
</tr>
<tr>
<td>New graduate hires (key employee positions)</td>
<td>58 (6)</td>
<td>30 (2)</td>
<td>17 (2)</td>
</tr>
<tr>
<td>Mid-career hires</td>
<td>43 (5)</td>
<td>26 (2)</td>
<td>53 (4)</td>
</tr>
<tr>
<td>Hires with disabilities</td>
<td>5 (1)</td>
<td>2 (1)</td>
<td>5 (0)</td>
</tr>
<tr>
<td>Hires of non-Japanese nationals</td>
<td>1 (1)</td>
<td>1 (1)</td>
<td>2 (2)</td>
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</table>

Numbers in parentheses are the number of female hires.

Leveraging Non-Japanese Human Resources

As globalization continues, we are expanding personnel exchanges with the Group’s non-Japanese employees based overseas and actively hiring foreign nationals in Japan in order to leverage their experience with different value systems and cultures.

Helping Women Succeed

As of March 31, 2016, the percentage of UBE employees and managers who are women stood at 6.7% and 1.1%, respectively. To facilitate the success of women in the Company, since fiscal 2014 we have held training for managers and female employees, working to change mindsets. Furthermore, under our three-year action plan, launched in fiscal 2016 based on the Act on Promotion of Women’s Participation and Advancement in the Workplace, we have set three concrete targets and are working to expand promotion and other opportunities for women and to improve the culture and atmosphere of our workplaces.

Training System Overview

<table>
<thead>
<tr>
<th>Level-Based Training</th>
<th>Training by Theme</th>
<th>International Business Personnel Development</th>
<th>Support for Self-Improvement</th>
<th>Independent Training</th>
<th>Affiliates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive</td>
<td>New executive training</td>
<td></td>
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<tr>
<td>Manager</td>
<td>Upper-level management training</td>
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<tr>
<td>Mid-level management training</td>
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<td>Key employee training</td>
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<td>Key employee training</td>
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Employment of People with Disabilities

The UBE Group actively undertakes measures to promote the employment of people with disabilities. The Group has organized a network to support the employment of people with disabilities and leverages the expertise accumulated by our special-purpose subsidiary, Libertas Ube, Ltd., established in 1991, to promote the Groupwide employment of such individuals.

Percentage of Employees with Disabilities

![Graph showing percentage of employees with disabilities from 2011 to 2015]
Employing Seniors
We are rehiring employees who have reached standard retirement age as senior employees and rethinking programs and other aspects of the workplace environment as well as working to change the mindsets of senior employees so that they can take advantage of their experience and skills to work with enthusiasm and dedication. 83.7% of new retirees in fiscal 2015 were retired and are now working within the UBE Group.

Work-Life Balance
We are working to improve systems to allow employees, regardless of gender, to continue working in ways that make sense for them at various stages of their lives and to create a climate that ensures that employees are able to take advantage of such systems.

Support for Childcare and Nursing
UBE has in place several systems to accommodate employees who require time to take care of their children or other family members. These include childcare leave, nursing care leave and reduced working hours.

Furthermore, based on the Act on Advancement of Measures to Support Raising Next-Generation Children, UBE has developed a main activity plan for general businesses to help ensure an employment environment that allows employees to use their abilities to the fullest while both working and raising children. To this end, UBE also strives to ensure that work conditions are wide-ranging and flexible. Part of childcare leave is paid, and UBE has undertaken initiatives to allow male employees to actively participate in child rearing. In 2013 and again in 2015, UBE received “Kurumin” next-generation certification as a company that is friendly to child rearing. Under the four-year action plan launched in fiscal 2015, we are working toward the following three goals: 1) implement measures to firmly establish support systems for employees that are taking care of children or other family members while working and facilitate the flexible use of such systems, 2) enhance childcare support, and 3) expand social contribution programs related to raising the next generation.

Encouraging Employees to Take Annual Paid Vacation
To encourage employees to systematically take their annual paid vacation and reduce working times, we ask employees to select scheduled vacation dates in advance for every six-month period and we have set an annual recommended paid vacation day, among other measures.

Flexible Working Systems
We have introduced flextime, self-managed work,* a system for taking annual paid vacation in half-day units, and other systems to enable employees to work in a flexible and efficient manner. We are also committed to appropriately managing employees’ working hours. For example, we provide guidance for departments with long overtime work hours in implementing measures to help reduce these hours and arrange consultations between employees and industrial doctors.

* Self-managed work: A system that entrusts employees to make their own decisions regarding how to undertake their duties and the allocation of work time in order to achieve work-related goals.

Leaves for Volunteer Activities
The Group has established a system that enables UBE employees to use accumulated leave time for volunteer activities that contribute to society or local communities.

Usage of Main Work-Life Balance System (Fiscal 2015)

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
<th>Number of Employees Who Used It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childbirth leave</td>
<td>Employees whose spouses have given birth can take four days of paid leave.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>94 (77.1% of those eligible)</td>
<td></td>
</tr>
<tr>
<td>Childcare leave</td>
<td>Leave can be taken until the day before the child’s first birthday (or the child’s second birthday, in certain circumstances).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48 (including 44 men)</td>
<td></td>
</tr>
<tr>
<td>Family nursing leave</td>
<td>Employees can take leave to provide nursing care for family members (up to a total of 365 days)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Child nursing leave</td>
<td>Employees can take leave to nurse children in the third grade of elementary school or younger (five days per child can be taken each year, up to a maximum of ten days a year)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 (including 1 man)</td>
<td></td>
</tr>
<tr>
<td>Shortened working time</td>
<td>The working hours of employees caring for children in the third grade of elementary school or younger or nursing family members can be shortened by up to two hours per day.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 (including 0 men)</td>
<td></td>
</tr>
</tbody>
</table>

Quality Working Environments
Respect for Human Rights at Workplaces
We have established the Human Rights Education Promotion Committee as part of efforts to provide human rights education to employees, including training for company officers, training divided by workplace and rank, and lectures by external instructors. We implement Groupwide training programs via e-learning to ensure that all employees have a proper understanding of and fully recognize human rights issues. Such initiatives help ensure work environments where all employees are respected as human beings.

Working with the Labor Union
UBE maintains labor agreements with the Ube Industries labor union and seeks to promote smooth labor-management relations. Through the Central Labor-Management Conference, in which members of top management participate, we engage in open discussion aimed at promoting understanding of management policy and plans while reflecting the opinions of union members in management.

Workplace Tours for Families
We offer workplace tours of factories for the families that support our employees, providing them with a rare opportunity to see the environments employees work in and what they do. By helping families better understand our workplaces, these tours promote communication within private households and help increase employees’ feelings of motivation toward their work.

Paid Vacation and Overtime Hours at UBE

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual paid vacation usage</td>
<td>60.5%</td>
<td>64.2%</td>
<td>66.5%</td>
</tr>
<tr>
<td>Overtime hours worked (annual)</td>
<td>172</td>
<td>185</td>
<td>199</td>
</tr>
</tbody>
</table>
What does “health” really mean? This is a surprisingly difficult question. The definition of health in the World Health Organization’s constitution is a well-known one. It defines health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” In other words, forming healthy social relationships, using one’s own abilities to work with vigor, and achieving a fulfilling lifestyle could be said to be health. Maintaining health is something that each person must do themselves, but it is not easy to do alone, and even if we wish to make changes to our lifestyle habits, it can be hard to follow through. That is why consideration from the Company is important, and it is where we industrial health specialists can help. We seek to support employees’ efforts to be healthy, always staying alert and reaching out to employees. By doing so, we hope to ensure that the Health Management Office can give employees the emotional and practical support they need.

Sumiko Murakami
Safety Team (Health Management Office)
Chiba Petrochemical Factory

What does “health” really mean? This is a surprisingly difficult question. The definition of health in the World Health Organization’s constitution is a well-known one. It defines health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”

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We seek to support employees’ efforts to be healthy, always staying alert and reaching out to employees. By doing so, we hope to ensure that the Health Management Office can give employees the emotional and practical support they need.
Environment and Safety Management

At the UBE Group, conserving the environment and protecting health and safety come first in 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 the UBE Group’s 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 2015

Yuzuru Yamamoto
President and Group CEO, Representative Director
Environment and Safety Promotion System

The UBE Group has established the Group Environment and Safety (ES) Committee and the Group Product Safety (PS) Committee as the top decision-making organizational units for the promotion of the Environmental and Safety Principles. In addition, the Group has established the Group High-Pressure Gas Safety (HPGS) Committee for decision-making regarding the process safety measures outlined in the ministerial order related to the High Pressure Gas Safety Act. These committees comprise members of the Group Management Committee, which is headed by the Group CEO (the president), and decide and revise policies and measures related to Group issues in the areas of the environment, safety and health, product safety, and process safety.

The Group ES Committee and the Group PS Committee have established subcommittees for each segment. These subcommittees are involved in translating the policies of Group-level committees into concrete initiatives appropriate to segment business activities. In addition, the Group ES Committee maintains four other subcommittees charged with implementing activities across the Group based on their specific areas of responsibility.

Responsible Care Management System

Aiming for continuous improvement in areas related to the environment, occupational safety and health, product safety, and process safety, the UBE Group pursues responsible care (RC)* initiatives in all its business areas. With the aim of achieving constant improvement, RC is undertaken according to the Plan-Do-Check-Action (PDCA) cycle. To steadily promote RC initiatives, the UBE Group systematically implements the PDCA cycle each year.

Measures to be applied during the fiscal year are established through deliberations and decisions made by the Group ES Committee. Each office and facility formulates action targets and schedules for the year based on these measures.

Each office and facility makes corrections to problem areas identified in audits and inspections. Audit and inspection results are reported to the Group ES Committee and then reflected in the next fiscal year’s measures.

The status of implementation is checked through environment and safety audits and inspections, and problem areas are identified.

Glossary

* 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 and/or recycling. 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); chemical 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); logistics safety (strive to prevent logistics-related accidents and disasters); and communication (announce activity details and results and promote social dialogue).
In order to advance its medium-term environment and safety policy, each fiscal year the UBE Group strives to improve its environment and safety activities by formulating action plans in line with its Responsible Care Code and through the use of the PDCA cycle.

Fiscal 2015 evaluation: Plans were achieved or mostly achieved in all categories.

### Environment and Safety Activity Targets and Results

#### Outline of Environment and Safety Activities

In order to advance its medium-term environment and safety policy, each fiscal year the UBE Group strives to improve its environment and safety activities by formulating action plans in line with its Responsible Care Code and through the use of the PDCA cycle.

Fiscal 2015 evaluation: Plans were achieved or mostly achieved in all categories.

<table>
<thead>
<tr>
<th>Responsible Care Code</th>
<th>FY2015 Action Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process Safety and Disaster Prevention</strong></td>
<td></td>
</tr>
<tr>
<td>Reinforcing process safety frameworks</td>
<td>1. Create methods to collect and use information about accidents and problems</td>
</tr>
<tr>
<td></td>
<td>2. Implement risk assessments for exceptional circumstances and emergencies</td>
</tr>
<tr>
<td></td>
<td>3. Survey process safety technologies and create a policy for their use</td>
</tr>
<tr>
<td>Earthquake and tsunami readiness</td>
<td>1. Steadily implement Earthquake and Tsunami Countermeasure Plans</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Occupational Safety and Health</strong></td>
<td></td>
</tr>
<tr>
<td>Health management</td>
<td>1. Curb days lost to non-occupational injuries and illnesses</td>
</tr>
<tr>
<td></td>
<td>2. Respond to regular health check results</td>
</tr>
<tr>
<td></td>
<td>1. Promote evaluations of small groups for safety initiatives and provide guidance for workplaces where improvement is needed</td>
</tr>
<tr>
<td></td>
<td>2. Increase safety level through improvements focused on each location’s weaknesses</td>
</tr>
<tr>
<td></td>
<td>3. Enhance front-line capabilities through on-the-job training (OJT)</td>
</tr>
<tr>
<td>Occupational safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Promote measures to prevent global warming</td>
</tr>
<tr>
<td></td>
<td>1-1. [Energy-oriented] CO₂ emissions: Down 15% compared with the fiscal 1990 level</td>
</tr>
<tr>
<td></td>
<td>1-2. [Energy-oriented + Non-energy-oriented (excluding waste-oriented)] CO₂ emissions: Down 20% compared with the fiscal 1990 level</td>
</tr>
<tr>
<td></td>
<td>1-3. Reduce CO₂ emissions by reducing energy use (130,000 ton reduction)</td>
</tr>
<tr>
<td></td>
<td>1-4. Investigate risks and opportunities presented by climate change</td>
</tr>
<tr>
<td></td>
<td>2. Implement initiatives to conserve biodiversity</td>
</tr>
<tr>
<td></td>
<td>3. Set goals for the next medium-term plan (FY2016-2018)</td>
</tr>
<tr>
<td>Environmental preservation</td>
<td></td>
</tr>
<tr>
<td>Global warming countermeasures</td>
<td>1. Steadily respond to environmental laws and regulations and reduce risk</td>
</tr>
<tr>
<td></td>
<td>2. Steadily reduce emissions of chemical substances</td>
</tr>
<tr>
<td></td>
<td>3. Promote recycling of industrial waste and steadily reduce its external final disposal</td>
</tr>
<tr>
<td>Reducing emissions of environmentally hazardous substances</td>
<td>1. 1-1. Enhance chemical management systems in Japan through training, auditing and other measures</td>
</tr>
<tr>
<td></td>
<td>1-2. Gather legal information in coordination with domestic offices and business units and reinforce management structures in line with each country’s laws</td>
</tr>
<tr>
<td></td>
<td>1-3. Continue SDS*3 and label creation and correction in line with the laws of each country</td>
</tr>
<tr>
<td></td>
<td>2. Reduce quality loss costs through management led by offices and facilities</td>
</tr>
<tr>
<td></td>
<td>3. Implement chemical substance risk management</td>
</tr>
<tr>
<td></td>
<td>3-1. Continue to check GHS*4 workplace labels</td>
</tr>
<tr>
<td></td>
<td>3-2. Adjust work environments to facilitate chemical substance risk assessments</td>
</tr>
<tr>
<td>Chemical and product safety</td>
<td>1. Response to chemical regulations</td>
</tr>
<tr>
<td></td>
<td>1-1. Enhance chemical management systems in Japan through training, auditing and other measures</td>
</tr>
<tr>
<td></td>
<td>1-2. Gather legal information in coordination with domestic offices and business units and reinforce management structures in line with each country’s laws</td>
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<tr>
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<td>3-1. Continue to check GHS*4 workplace labels</td>
</tr>
<tr>
<td></td>
<td>3-2. Adjust work environments to facilitate chemical substance risk assessments</td>
</tr>
<tr>
<td>Transportation safety</td>
<td>1. Transportation safety</td>
</tr>
<tr>
<td></td>
<td>Update internal operating rules and transportation safety management guidelines, and continually reinforce the operating system</td>
</tr>
<tr>
<td><strong>Dialogue with Communities</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Promote dialogue with communities</td>
</tr>
<tr>
<td></td>
<td>2. Improve information disclosure and transparency</td>
</tr>
<tr>
<td><strong>Management Systems</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Implement environment and safety audits and inspections and quality and product safety audits</td>
</tr>
</tbody>
</table>

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The UBE Group’s Medium-Term Environmental & Safety Policy (Fiscal 2013–2015)

Continually improving the quality of RC.
## FY2015 Results

<table>
<thead>
<tr>
<th>1. Promote measures to prevent global warming</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1. Energy-oriented CO2 emissions: Reduced 20% compared with the fiscal 1990 level</td>
</tr>
<tr>
<td>1-2. Energy-oriented + Non-energy-oriented (excluding waste-oriented) CO2 emissions: Reduced 23% compared with the fiscal 1990 level</td>
</tr>
<tr>
<td>1-3. Reduced CO2 emissions by 80,000 tons in fiscal 2015 (reflecting the implementation of planned measures)</td>
</tr>
<tr>
<td>1-4. Each division identified, organized and shared information about risks and opportunities presented by specific causes of climate change</td>
</tr>
<tr>
<td>2. Shared information through biodiversity preservation study meetings, participated in woodland conservation activities and educated employees</td>
</tr>
<tr>
<td>3. Target for the next medium-term plan: Reduce greenhouse gas emissions from the domestic UBE Group and main overseas facilities 15% compared with fiscal 2005 by fiscal 2021</td>
</tr>
</tbody>
</table>

| 1. Shared and utilized information gathered by the Process Safety Management Liaison Group and Accident Information Liaison Group |

| 2. Began using irregular HAZOP* as a method for assessing risks related to irregular operations and emergencies |
| 3. Implemented surveys of such process safety technologies as non-destructive testing |

| 1. Created and implemented Earthquake and Tsunami Countermeasure Plans at each department and location in light of government guidelines and revisions to earthquake resistance standards |

| 2. Used results from health examinations to implement health risk diagnoses and responses, lifestyle-related disease countermeasures, overwork countermeasures and dietary environment improvement initiatives |

| 1. Promoted mental health initiatives, including adoption of local subsidiary's local health Act and preparation for a new mental health system |

| 2. Carried out quantitative evaluations of small groups for safety initiatives at offices and facilities and made results clearer. Also supported measures to prevent recurrences at workplaces that had had multiple accidents related to small groups for safety in recent years and thus are designated as needing to improve. |

| 2. Evaluated facility safety using environment and safety audits. Used quantitative evaluations to identify strong and weak points and promote safety enhancement. |

| 1. Reflected past actual accidents in experiential training provided by training centers and began on-the-job training (OJT) that includes key safety points |

| 1. Shared and utilized information gathered by the Process Safety Management Liaison Group and Accident Information Liaison Group |

| 1. Promoted measures for preventing chemical accidents and ensuring adequate response to chemical disasters |

| 1-1. Implemented internal audits of 12 business sites in Japan and implemented legal education by external consultants to raise the knowledge level of staff responsible for chemical substance management |
| 1-2. Built management systems under local subsidiaries in the United States, China and South Korea. The management system in Taiwan is in progress. Also began creating systems at Group locations in other ASEAN countries and Central and South America. |
| 1-3. Continued using SDS/labels based on each country's laws and regulations. Confirmed the compliance of such measures with 375 laws in fiscal 2015 |

| 2. Shared information through biodiversity preservation study meetings, participated in woodland conservation activities and educated employees |

| 2-1. Continued implementing environment and safety audits and inspections and quality and product safety audits |

| 2-2. UBE implemented quality and product safety audits at 12 facilities and Group companies |
| 2-3. Implemented environmental safety inspections at six facilities and Group companies |

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### Glossary

*1. Irregular HAZOP: Short for irregular hazard and operability study. A method for identifying hidden process risks in operations at times of irregular operation, such as plant startup or shutdown.

*2. Small groups for safety: Teams of employees (of the UBE Group or partner companies) with limited numbers of participants to maximize the effectiveness of supervision by team leaders. Each small group for safety has its own safety goals to encourage employees to take initiative in safety promotion.

*3. SDS: Safety Data Sheet, documentation containing the product name, physicochemical properties, hazard and toxicity information, usage, and related laws and regulations.

*4. GHS: Globally Harmonized System of Classification and Labeling of Chemicals, a universally standardized hazardous chemical classification system used in preparing SDS and container labels.
Process Safety and Disaster Prevention

Initiatives for Industrial Safety
In light of damage to petrochemical complexes due to the Great East Japan Earthquake and numerous serious accidents at chemical plants, industrial process safety has become a major social issue. Based on reports from the Ministry of Economy, Trade and Industry as well as action plans and guidelines recommended by industry organizations, the UBE Group incorporated reinforcing process safety frameworks and earthquake and tsunami readiness as key measures in its fiscal 2015 action plans (see pages 25 to 26), and is working to prevent industrial accidents.


Building a Companywide Response System for Large-Scale Plant Disasters
Because large-scale accidents are likely to cause significant harm that extends beyond the facility where they occur, rapid and precise conveyance of information and response are particularly important. To that end, the UBE Group maintains a practical manual that clarifies the role of each organization as well as topics related to the internal contact system and external response.

Earthquake and Tsunami Readiness
In light of governmental guidance and revised earthquake resistance standards, the Group Earthquake Countermeasures Committee discussed overall policy. Divisions and offices formulated and implemented Earthquake and Tsunami Countermeasure Plans.

Emergency Drills
The Group regularly implements emergency drills, including such responses as reporting, issuing alerts, and extinguishing fires at its facilities. We have also secured evacuation sites and conduct evacuation drills in preparation for an earthquake or tsunami.

Plant Safety Assessment
Plant safety assessments of new, additional or modified facilities are carried out following the methods stipulated in the plant safety assessment standards. In fiscal 2015, the UBE Group carried out 85 such safety assessments.

UBE Group Facility-Related Accidents

Initiatives for Industrial Safety

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>UBE’s Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Commitment of corporate management to industrial process safety</td>
<td>UBE Group Environmental and Safety Principles and UBE Action Guidelines</td>
</tr>
<tr>
<td>(1) Express and strongly advance basic principles and policy</td>
<td>On-site roundtable meetings with top management are held at facilities each year, facilitating direct communication between the president and employees</td>
</tr>
<tr>
<td>(2) Appropriate resource allocation for industrial process safety (human resources, facilities, etc.)</td>
<td>Formulation of budgets and manpower plans based on plans for production and for facility maintenance and repair</td>
</tr>
<tr>
<td>2. Setting goals for industrial process safety</td>
<td>Numerical target: Zero major facility accidents</td>
</tr>
<tr>
<td>(1) Set numerical targets for process safety</td>
<td></td>
</tr>
<tr>
<td>(2) Education and training (development of human resources who can understand entire processes)</td>
<td>Using a broad interpretation of irregular times, we are beginning risk assessments of possible incorrect operation</td>
</tr>
<tr>
<td>(3) Utilize information about accidents</td>
<td>Implementing Companywide initiatives to reinforce the process safety framework</td>
</tr>
<tr>
<td>(4) Prevent facility problems (facility maintenance and deterioration countermeasures)</td>
<td>Reviewing methods of training and drilling aimed at enhancing emergency response capabilities</td>
</tr>
<tr>
<td>(5) Ensure earthquake resistance of high-pressure gas facilities</td>
<td>Sharing information on accidents and their countermeasures through the Accident Information Liaison Group</td>
</tr>
<tr>
<td>3. Formulating action plans to implement industrial process safety measures</td>
<td>Sharing information on facility failure and problems through the Process Safety Management Liaison Group</td>
</tr>
<tr>
<td>(1) Risk assessments (RA) at irregular times</td>
<td></td>
</tr>
<tr>
<td>(2) Education and training (development of human resources who can understand entire processes)</td>
<td>Companywide initiatives implemented to review earthquake and tsunami damage predictions and formulate countermeasures.</td>
</tr>
<tr>
<td>(3) Utilize information about accidents</td>
<td>Action plans formulated for each facility to evaluate compliance with high-pressure gas facility earthquake resistance standards and formulate countermeasures</td>
</tr>
<tr>
<td>4. Surveying and evaluating achievement of goals and implementation of measures</td>
<td></td>
</tr>
<tr>
<td>(1) Evaluate and confirm achievements and results, and reflect them in the next year’s plans</td>
<td>Checks and evaluations of implementation status through yearly audits. Environment and Safety Committees consider the results of the year’s activities when discussing measures for the next year</td>
</tr>
<tr>
<td>5. Initiatives to advance each company’s own process safety activities</td>
<td>Recognition by the president at Group safety and health rallies of individuals, small groups for safety, facilities and partner companies that achieved excellent results</td>
</tr>
<tr>
<td>(1) Evaluate everyday process safety activities</td>
<td>Implemented the Process Safety Enhancement Center’s Process Safety Evaluation System and began evaluations in fiscal 2013</td>
</tr>
<tr>
<td>(2) Develop a culture of safety (utilize conferences, etc.)</td>
<td></td>
</tr>
</tbody>
</table>
Measures to Prevent Occupational Accidents

Utilizing Occupational Accident-Related Information
UBE compiles occupational accident-related information into a database that is made openly available within the Company. Examples of countermeasures are shared horizontally within offices and facilities, and are used as important data in risk assessments of facilities and operations, helping to prevent the occurrence of similar accidents.

Enhancing Small Groups for Safety Activities
UBE began using the small groups for safety approach in fiscal 2009 and has made the quantitative evaluations (begun in fiscal 2014) and results of each group’s activities more accessible and easier to grasp. At the UBE Group safety and health rally held every year, outstanding small groups for safety teams recommended by their divisions or facilities are recognized by the president. These initiatives help to raise safety awareness.

Enhancing Safety and Disaster Prevention Training
The increasing pace of the generational shift from older to younger employees is making the passing along of skills ever more important. As such, we are focusing on experiential training. In fiscal 2014, we established a training system that spans the three divisions listed below and launched experiential training that simulates such situations as being caught in machinery or working in high places.

These training centers are also open to partner companies. By adding lessons based on examples of past accidents as appropriate, we aim to enhance Companywide safety and disaster prevention training.

UBE Group Safety and Health Rally
The Ube Group holds a safety and health rally every year. Over 400 UBE Group managers and employees from across Japan participate, sharing information and fostering motivation. In addition, individuals and groups that have made particularly outstanding contributions to safety and health receive recognition from the Group president. The event also features presentations from small groups for safety teams on their experiences and special lectures from outside instructors about safety and health management, helping to raise safety awareness.

At the end of the rally, all participants, including managers, join together in reciting our safety pledge, renewing their commitment to eliminating accidents and improving work environments.

UBE Lost-Time Injury Frequency Rate

Measures against Asbestos
Employees who have handled asbestos-related products, including those who are now retired, undergo regular health examinations. The Group cooperates in the submission of industrial accident reports by individuals whose examination results warrant medical attention. The Group also appropriately treats problems at locations where a high rate of asbestos diffusion has been found. In addition, the Group is promoting systematic measures for the disposal and replacement of asbestos materials. Insulation and gasket packing are replaced regularly with substitute materials when piping and reactors are opened.

Confirmation via Audits and Inspections
We implement audits and inspections of each office and facility individually. Audits are performed by auditors comprising environment and safety staff from the Head Office and other offices and facilities. Each audit consists of a quantitative assessment using a checklist of items related to such topics as the site’s policies, environmental and safety management plan and its implementation, communication with employees and partner companies, and accident and disaster countermeasures. The results of these assessments help identify strong and weak points, details of which are included in feedback provided to the site. Since fiscal 2013, excellent initiatives are compiled into a collection of best practices and reflected in the Safety and Health Guidelines, which are published within the Group.

Inspections are conducted by members of the Group Strategic Management Committee (chaired by the president), who visit offices and facilities to confirm the results of audits and achievements of initiatives and provide feedback.

The results of these audits and the feedback from these inspections help offices and facilities improve any weak points and increase their level of safety.

UBE Group Safety and Health Rally
The Ube Group holds a safety and health rally every year. Over 400 UBE Group managers and employees from across Japan participate, sharing information and fostering motivation. In addition, individuals and groups that have made particularly outstanding contributions to safety and health receive recognition from the Group president. The event also features presentations from small groups for safety teams on their experiences and special lectures from outside instructors about safety and health management, helping to raise safety awareness.

At the end of the rally, all participants, including managers, join together in reciting our safety pledge, renewing their commitment to eliminating accidents and improving work environments.

UBE Group CSR Report 2016   28
Since fiscal 1999, the UBE Group has employed environmental accounting as a tool for quantitatively understanding and evaluating the costs and effects of environmental preservation in Group business activities while promoting more efficient, sustained environmental preservation.

The results for fiscal 2015 are as shown in the following tables.

### Environmental Preservation Costs

<table>
<thead>
<tr>
<th>Category</th>
<th>Main Activity</th>
<th>Capital Investment</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FY2014</td>
<td>FY2015</td>
</tr>
<tr>
<td>Pollution prevention</td>
<td>Investing in and maintaining energy-saving facilities</td>
<td>11.5</td>
<td>11.8</td>
</tr>
<tr>
<td>Investing in and maintaining air and water pollution prevention facilities</td>
<td>Resource recycling</td>
<td>3.8</td>
<td>47.5</td>
</tr>
<tr>
<td>Global environment preservation</td>
<td>Recycling and reducing industrial waste</td>
<td>7.7</td>
<td>6.4</td>
</tr>
<tr>
<td>Upstream/downstream costs</td>
<td>Container/packaging recycling, green purchasing</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Costs of management activities</td>
<td>Acquiring, running and maintaining environmental management systems</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Research and development costs</td>
<td>R&amp;D of environment-friendly products and technologies</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Costs of social activities</td>
<td>Greening and beautifying offices/facilities and their surroundings</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Costs of cleaning up environment damage</td>
<td>Payment of environment-related levy</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23.6</td>
<td>66.3</td>
</tr>
</tbody>
</table>

### Economic Effect

<table>
<thead>
<tr>
<th>Category</th>
<th>Effect</th>
<th>FY2014</th>
<th>FY2015</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income effect</td>
<td>Proceeds from sales of marketable waste products</td>
<td>14.2</td>
<td>23.2</td>
<td>9.0</td>
</tr>
<tr>
<td>Savings effect</td>
<td>Savings achieved through resource recycling and energy conservation</td>
<td>37.0</td>
<td>77.2</td>
<td>40.2</td>
</tr>
</tbody>
</table>

**UBE Group Environmental Accounting Method**

- Companies covered: UBE Group companies (only consolidated subsidiaries described under “Companies covered” on page 57, except for Ems-Ube, Ltd. and UBE-MC Hydrogen Peroxide, Limited).
- The economic effect is the effect obtained in fiscal 2015 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 eliminated.
The UBE Group recognizes that environment-oriented business practices are vital to its continued growth. We will continue to promote measures to prevent global warming, reduce emissions of chemical substances, and reduce and effectively use industrial waste in order to continuously foster business activities that contribute to the formation of a recycling-based society.

### Glossary

1. Shows total CO₂ emission volumes (excluding waste used as raw materials and fuel)
2. Six gases, namely CH₄, N₂O, HFC, PFC, SF₆ and NF₃
3. SOx: Sulfur oxides originate in the sulfur (S) component of fuels. Boilers are UBE’s main source of SOx.
4. NOx: Nitrogen oxides originate when a fuel is combusted in the air. Boilers and cement kilns are UBE’s main sources of NOx.
5. The 462 substances specified under the Japanese PRTR Law, on an aggregate basis (see page 37).
6. 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.

### Environmental Performance

#### Overview of the UBE Group’s Environmental Impact in Fiscal 2015

<table>
<thead>
<tr>
<th>Input</th>
<th>UBE Group Business Activities</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Energy</strong></td>
<td><strong>Production</strong></td>
<td><strong>Airborne Emissions</strong></td>
</tr>
<tr>
<td>As crude of 2,310,000 kl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Raw Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16,813,000 t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water used 212,000,000 m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Fiscal 2014 and 2015 Environmental Impact Data by Facility

<table>
<thead>
<tr>
<th>Facility</th>
<th>SOx Emissions</th>
<th>NOx Emissions</th>
<th>Dust Emissions</th>
<th>COD Emissions</th>
<th>Total Phosphorus Emissions</th>
<th>Total Nitrogen Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chiba Petrochemical Factory</strong></td>
<td>1.1</td>
<td>0.7</td>
<td>41</td>
<td>34</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Sakai Factory</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>8</td>
<td>3</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>UBE Chemical Factory</strong></td>
<td>1,963</td>
<td>1,692</td>
<td>3,372</td>
<td>3,612</td>
<td>132</td>
<td>116</td>
</tr>
<tr>
<td><strong>UBE-Fujimigari Factory</strong></td>
<td>512</td>
<td>615</td>
<td>412</td>
<td>528</td>
<td>3.8</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>UBE Cement Factory</strong></td>
<td>40</td>
<td>31</td>
<td>1,364</td>
<td>1,439</td>
<td>55</td>
<td>53</td>
</tr>
<tr>
<td><strong>Isa Cement Factory</strong></td>
<td>349</td>
<td>366</td>
<td>7,514</td>
<td>6,830</td>
<td>166</td>
<td>157</td>
</tr>
<tr>
<td><strong>Kanda Cement Factory</strong></td>
<td>7.6</td>
<td>6.2</td>
<td>2,518</td>
<td>2,494</td>
<td>56</td>
<td>37</td>
</tr>
<tr>
<td><strong>Technical Development Center</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Okinoyama Coal Center</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>UBE District Research Laboratories</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Organic Specialty Materials Research Laboratory</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Subtotal UBE</strong></td>
<td>2,872</td>
<td>2,711</td>
<td>15,228</td>
<td>14,940</td>
<td>413</td>
<td>369</td>
</tr>
<tr>
<td><strong>UBE Film, Ltd.</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Melwa Plastic Industries, Ltd.</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Ems-Ube, Ltd.</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>3.2</td>
<td>2.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>UBE-MC Hydrogen Peroxide, Limited.</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>UBE Exsymo Co., Ltd.</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>UBE Material Industries, Ltd.</strong></td>
<td>124</td>
<td>119</td>
<td>972</td>
<td>893</td>
<td>36</td>
<td>28</td>
</tr>
<tr>
<td><strong>UBE Board Co., Ltd.</strong></td>
<td>0.3</td>
<td>—</td>
<td>5.0</td>
<td>—</td>
<td>1.9</td>
<td>—</td>
</tr>
<tr>
<td><strong>UBE Machinery Corporation, Ltd.</strong></td>
<td>0.0</td>
<td>0.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>UBE Steel Co., Ltd.</strong></td>
<td>15</td>
<td>14</td>
<td>44</td>
<td>45</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td><strong>Fukushima, Ltd.</strong></td>
<td>0.5</td>
<td>0.5</td>
<td>29</td>
<td>29</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Subtotal Group companies</strong></td>
<td>140</td>
<td>134</td>
<td>1,053</td>
<td>970</td>
<td>49</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total UBE Group</strong></td>
<td>3,012</td>
<td>2,845</td>
<td>16,281</td>
<td>15,910</td>
<td>462</td>
<td>409</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>4</td>
<td>5</td>
<td>48</td>
<td>46</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>17</td>
<td>15</td>
<td>271</td>
<td>246</td>
<td>12</td>
<td>9</td>
</tr>
</tbody>
</table>

#### Note:
- Ube Board Co., Ltd. was dissolved in March 2015.

### UBE Group CSR Report 2016
Change & Challenge 2018

● Greenhouse Gas (GHG) Emissions Reduction Targets

**Target:** 15% Reduction from Fiscal 2015 by Fiscal 2021

(UBE Group in Japan and Main Business Locations Outside of Japan)

- **Target:** 15% Reduction from Fiscal 2015 by Fiscal 2021
- **Main strategies:**
  - Switch to phenol process for producing cyclohexanone
  - Increase use of waste as fuel
  - Adopt exhaust heat power generation

**Aiming for 30% or More of Overall Sales by Fiscal 2021**

- **Biomass fuels**
- **Environment-friendly coating materials**
- **Lithium-ion battery (LIB) electrolytes**
- **LIB separators**
- **Polyimide products**
- **Gas separation membranes**
- **Synthetic rubber**
- **Nylon (automotive applications)**
- **Recycling business**
- **Energy-efficient equipment**
- **(molding machines, air floating conveyors)**

**CO₂ Emission Intensity Index**

The fiscal 2015 CO₂ emission intensity index improved 10% compared with fiscal 2014.

**Energy Consumption and Energy Consumption Intensity Index**

The Group’s energy consumption in fiscal 2015 increased 11% compared with fiscal 2014. The energy consumption intensity index was on par with fiscal 2014.

**Efforts in Logistics**

Under its Logistics Re-Engineering Project aimed at improving logistics efficiency, the UBE Group continues to improve load ratios by using larger lots and co-loading in coordination with customers, as well as by optimizing vehicle selection. We are also promoting modal shifts by expanding rail transport as well as adopting larger vehicles for transport within Group facilities and larger vessels for transporting coal ash.

As a result, energy consumption intensity in fiscal 2015 was 2.7% better than the average for the past five years, achieving the goal of a 1% or greater improvement.
Efforts in Factories
The UBE Group is working to reduce energy consumption through far-reaching energy-saving measures being undertaken at all factories. In fiscal 2015, through the reduction of steam use and reduction of electricity use through facility streamlining and other initiatives, we reduced our CO2 emissions by approximately 80,000 tons. In particular, exhaust heat power generation facilities that came online in December 2015 at the Kanda Cement factory are expected to reduce CO2 emissions by 50,000 tons per year (see page 33). Furthermore, at the Ube Chemical Factory, we finalized plans to switch to a more efficient method of producing cyclohexanone, an intermediate used to make caprolactam, with the transition expected to be completed in fiscal 2017. Compared to the current production method, the new method’s manufacturing process is shorter, making the plant more compact, and achieves a higher yield ratio. Furthermore, because these facilities will use significantly less steam and electricity, they will help to reduce GHG emissions (an annual reduction of approximately 190 kt-CO2).

Understanding CO2 Emissions throughout the Supply Chain
To understand and work to reduce CO2 emissions throughout the supply chain, the UBE Group measures scope 3 emissions.

Total scope 3 CO2 emissions in fiscal 2015 were calculated at 15,940 kt-CO2. To reduce these emissions and its environmental burden, the UBE Group is advancing initiatives to utilize biomass, enhance the energy-saving functions of die-casting machines and other products, and expand sales of polyurethane dispersion (PUD) and polycarbonate diol (PCD), which help reduce the use of volatile organic compounds (VOCs) when used as ingredients in resins for waterborne coatings.

Scope 3 Emissions (Domestic UBE Group)

<table>
<thead>
<tr>
<th>Category</th>
<th>GHG Emissions (kt-CO2)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Purchased goods and services</td>
<td>850</td>
<td></td>
</tr>
<tr>
<td>2 Capital goods</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>3 Fuel- and energy-related activities not included in Scope 1 or Scope 2</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>4 Upstream transportation and distribution</td>
<td>880</td>
<td></td>
</tr>
<tr>
<td>5 Waste generated in operations</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>6 Business travel</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7 Employee commuting</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8 Upstream leased assets</td>
<td>——</td>
<td>Included in Scope 1 and Scope 2*</td>
</tr>
<tr>
<td>9 Downstream transportation and distribution</td>
<td>490</td>
<td></td>
</tr>
<tr>
<td>10 Processing of sold products</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>11 Use of sold products</td>
<td>11,310</td>
<td>Sold coal, machinery, etc.</td>
</tr>
<tr>
<td>12 End-of-life treatment of sold products</td>
<td>1,700</td>
<td></td>
</tr>
<tr>
<td>13 Downstream leased assets</td>
<td>——</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14 Franchises</td>
<td>——</td>
<td>Not applicable</td>
</tr>
<tr>
<td>15 Investments</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15,930</td>
<td></td>
</tr>
</tbody>
</table>

*Scope 1: Direct emissions from a reporting entity, due to fuel use, etc.
*Scope 2: Indirect emissions from electricity and heat purchased from other entities
*Scope 3: Indirect emissions of CO2 throughout the supply chain, such as those that occur during material procurement, transport and product processing, use and disposal.
Environmental Preservation through Waste Recycling and Waste

The Cement Industry—Helping to Create a Recycling-Based Society

Japan’s cement industry boasts world-leading energy efficiency. Since 1875, it has produced the basic materials used to construct buildings, dams, tunnels, bridges and other infrastructure, creating the foundation for our daily lives. Today, the industry accepts an annual 29 million tons of waste—enough to fill Tokyo Dome 15 times—that it recycles as raw materials and fuel for making cement. The material taken in comprises more than 20 types of waste and byproducts from industry and households as well as urban waste. The heat of the cement calcining process, which reaches 1,450°C, completely breaks down harmful substances contained in waste. Thus, by addressing the social issues of environmental preservation and landfill shortage, the cement industry contributes greatly to helping realize a recycling-based society.

The Kanda Cement Factory—UBE’s Main Recycling Factory

UBE’s unique cement business centers on the Ube and Isa cement factories in Yamaguchi Prefecture and the Kanda Cement Factory in Fukuoka Prefecture. Reflecting evolving social needs, the last of these, which began

Energy Index: Energy Needed to Produce One Ton of Cement Intermediate (Clinker) (With Japan as 100)

<table>
<thead>
<tr>
<th>Country</th>
<th>Energy Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>100</td>
</tr>
<tr>
<td>Thailand</td>
<td>90</td>
</tr>
<tr>
<td>Italy</td>
<td>80</td>
</tr>
<tr>
<td>Mexico</td>
<td>70</td>
</tr>
<tr>
<td>Germany</td>
<td>60</td>
</tr>
<tr>
<td>India</td>
<td>50</td>
</tr>
<tr>
<td>Spain</td>
<td>40</td>
</tr>
<tr>
<td>Brazil</td>
<td>30</td>
</tr>
<tr>
<td>South Korea</td>
<td>20</td>
</tr>
<tr>
<td>Canada</td>
<td>10</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>9</td>
</tr>
<tr>
<td>China</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Japan Cement Association website

Specific energy consumption: Improved 15%

CO₂ emissions from energy use: Down about 10% (50,000 tons/year)

Waste Used by Ube

<table>
<thead>
<tr>
<th>Sector</th>
<th>Waste Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional and local governments</td>
<td>Sewage sludge, water supply sludge, ash from incinerated municipal waste</td>
</tr>
<tr>
<td>Automotive industry</td>
<td>Waste tire, foundry sand, automobile shredder residue</td>
</tr>
<tr>
<td>Steel industry</td>
<td>Blast furnace slag, iron and steel slag, dust collector ash</td>
</tr>
<tr>
<td>Paper-making industry</td>
<td>Paper sludge, incinerated ash</td>
</tr>
<tr>
<td>Electricity industry</td>
<td>Coal ash, by-product gypsum</td>
</tr>
<tr>
<td>Waste processing industry</td>
<td>Ash, waste plastic</td>
</tr>
<tr>
<td>Smelting industry</td>
<td>Non-ferrous slag</td>
</tr>
<tr>
<td>Housing industry</td>
<td>Used tatami, wood waste</td>
</tr>
<tr>
<td>Food product industry</td>
<td>Distillery residue, sludge, waste plastic</td>
</tr>
<tr>
<td>Construction industry</td>
<td>Waste soil from construction, construction scraps and sludge</td>
</tr>
<tr>
<td>Oil industry</td>
<td>Waste oil, catalytic waste, sludge</td>
</tr>
<tr>
<td>Chemical industry</td>
<td>Sludge, ash, liquid waste</td>
</tr>
<tr>
<td>Printing industry</td>
<td>Waste oil, waste acids, waste alkali</td>
</tr>
<tr>
<td>Farming and livestock industries</td>
<td>Waste plastic, meat and bone meal</td>
</tr>
</tbody>
</table>

Environmental Preservation through Waste Recycling and Waste

UBE Group CSR Report 2016
operations in 1964, has become active in the promotion of waste recycling. In 1998, the factory began its efforts with the installation of recycled oil treatment facilities. In 2002, it installed waste plastic treatment facilities (1st train) and in 2005 a high-chlorine bypass system that achieved 10% removal of chlorine, the highest rate in the industry at the time. In these and other ways, the plant has expanded its use of waste that is difficult to handle, including ash from incinerated municipal waste. In 2012, we brought on line industry-first facilities capable of converting a wide variety of waste plastic to fuel, removing chlorine and solidifying it to make a fuel that offers performance on par with coal. This has allowed us to begin taking in automobile shredder residue and other waste that is difficult to recycle as a source of thermal energy. The Kanda Cement Factory has an important place in the UBE Group as our main recycling factory.

Using Efficient Waste Heat Power Generation Facilities to Reduce CO₂

The Paris Agreement reached at COP21 in December 2015 calls for eventually reaching zero net anthropogenic greenhouse gas emissions. In line with this, Japan has set the long-term goal of reducing its domestic greenhouse gas emissions 80% by 2050. The UBE Group is doing its part through various initiatives. In December 2015, new waste heat power generation facilities, which use the heat of exhaust from cement-making processes, came online at the Kanda Cement Factory. With a generating capacity of 12,650 kilowatts, these facilities help to reduce CO₂ emissions arising from energy use. The new facilities use waste heat (of about 400°C) generated by pre-heating facilities for calcining (at over 800°C) raw materials comprising pulverized and adjusted limestone and waste, redirecting it to boilers to generate electricity. Waste heat from the boilers (of about 230°C) is then used to dry the raw materials. Waste heat (of about 360°C) from the clinker coolers used to rapidly cool down clinker produced in rotary calcination kilns (operating at 1,450°C) is also redirected to boilers to generate electricity. All electricity produced is used to power the plant, which has contributed to a rise in the plant’s electricity self-sufficiency rate from 10% to 40%. UBE’s efficient waste heat power generation system capitalizes on the unique characteristics of its plant and has raised energy efficiency even further.
Using Waste

- Waste Recycling at Cement Factories

Cement Factories Are the Ultimate Resource Recycling Factories

Waste can be reused as a raw material (material recycling) and an alternative fuel (thermal recycling) in the cement-making process. For this reason, a wide variety of waste is treated at cement factories. Cement kilns contain a zone that reaches a very high internal temperature (1,450°C), where substances that cannot be disposed of by ordinary incinerators can be burned and degraded, for high-volume waste processing. 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.

The three UBE cement factories actively accept and reuse various waste materials, such as coal ash, from both inside and outside the UBE Group. In fiscal 2015, the UBE cement factories made effective use of around 3.41 million tons of waste and byproducts. Of this, about 3.00 million tons was sourced from outside of the UBE Group. This is one way the UBE is significantly contributing to the formation of a recycling-based society.

In addition, we are developing environment-related businesses to be future business pillars. UBE will continue to strengthen its systems for recycling for many years to come.

Waste and Byproduct Use

<table>
<thead>
<tr>
<th>FY</th>
<th>FY</th>
<th>FY</th>
<th>FY</th>
<th>FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Kanda Factory: Waste oil treatment facility</td>
<td>Isa Factory: Chlorine bypass system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Ube Factory: Waste plastic treatment facility (1st train)</td>
<td>Isa Factory: Waste plastic treatment facility (1st train)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Ube Factory: Wood chip co-combustion facility for in-house power generation</td>
<td>Isa Factory: Waste plastic treatment facility (2nd train)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>Kanda Factory: Ash pretreatment facility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>Kanda Factory: Waste plastic treatment facility (2nd train)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Ube Factory: Waste plastic treatment facility (2nd train)</td>
<td>Isa Factory: Sewage sludge waste treatment facility (2nd train)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Kanda Factory: Waste plastic pretreatment facility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Isa Factory: Sludge drying equipment</td>
<td>Ube Factory: Ash pretreatment facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>Isa Factory: Waste plastic treatment facility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>Enhanced shredding capability (1st and 2nd trains)</td>
<td>Ube Factory: Closed sludge injection facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>Kanda Factory: Enhanced plastic processing capacity (1st train)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Best Recycling Partner

Masanobu Gondo
President
Kyushu Metal Industry Co., Ltd.

Kyushu Metal Industry Co., Ltd. began as an automobile shredding business in Kitakyushu City in 1975 with a 2,000 horsepower industrial shredder. Since then, we have expanded our business to include the recycling of a wide range of items, including household electronics, office equipment, fiberglass-reinforced plastic (FRP) boats and other industrial waste. This business has become essential to the communities we serve.

Over the years, through trial and error, we have developed technology to sort scrap steel from other shredded materials. Thanks to this experience, in 2012 we received certification as an automobile shredder residue (ASR) recycling facility. We carefully collect and sort plastic and metals from ASR, and the remaining residue is then used by UBE and other cement factories as raw materials and fuel.

Given the added geographical benefit of the close proximity of our facilities to UBE’s, we consider UBE to be one of our best partners. I hope that we can continue to work together through the noble work of recycling for many years to come.

Flow of Cement Production

Main Ingredients of Cement

- Limestone, clay, silica, iron

Unit: 1,000t/y (fiscal 2015)

Used as Materials:
- Coal ash (1,230)
- Sludge (400)
- Others (250)

Byproducts:
- Byproduct gypsum (250)
- Blast furnace slag (630)

Alternative Fuel:
- Waste plastics, RDF,*1 Recycled oil, etc.

Total Waste and Byproducts Reused: 3,410Kt

Glossary

*1. Refuse Derived Fuel (RDF): Solid fuel made by compressing waste plastic, scrap wood and general garbage
plastic generated at chemical factories; coal ash generated at in-house power stations; and waste oil and inorganic waste generated at machinery factories.

Most of the industrial waste produced by Group factories is recycled at facilities within the Group.

**Industrial Waste Discharged from Factories**
When contracting waste treatment or disposal outside the Group, the UBE Group utilizes industrial waste management forms (a waste manifest system) in compliance with waste treatment and clean-up laws (namely the Wastes Disposal and Public Cleansing Act) and carefully manages the entire process.

**Industrial Waste for External Final Disposal**
In fiscal 2015, we recorded a 78% reduction in industrial waste for external final disposal, compared with our target for fiscal 2015 of 80%.

In fiscal 2016 and onward, we will continue to strive toward further reductions.

**Industrial Waste Reduction**
The entire UBE Group strives to recycle industrial waste and reduce its final disposal volume.

**Industrial Waste Recycling**
The UBE Group’s industrial waste includes sludge, waste oil and waste

---

**Overall Flow of Industrial Waste in Fiscal 2015**

- **On-site landfill amount**: 413 t
- **Industrial waste generated**: 604,159 t
- **In-house reduction**: 162,440 t
- **Waste discharged from factories**: 165,136 t
- **In-house recycling**: 276,170 t
- **Contracted reduction**: 17,093 t
- **Waste for external final disposal**: 7,193 t (Down 78% from Fiscal 2000)
- **Amount Recycled**: 417,020 t

---

**Industrial Waste Generated and That Disposed of Outside the Group**

- **Industriaw waste generated**
  - UBE Group companies
  - Fiscal years '11 to '15

- **Industrial Waste for External Final Disposal**
  - UBE Group companies
  - Fiscal years '00 to '15

---

**Industrial Waste Recycling Amount and Ratio**

- **UBE Group companies**
- **Waste recycling ratio (%)**

---

UBE Group CSR Report 2016 36
Management of Chemical Substances

- **Response to the Japanese PRTR Law**: UBE has voluntarily selected 20 substances that it emits relatively large amounts of and particularly strives to reduce its emissions of these substances. The 20 substances comprise substances subject to the Japanese PRTR Law as well as a number of volatile organic compounds (VOCs). Fiscal 2015 emissions of these substances were down 25% compared with fiscal 2010. As a result, UBE’s emissions of substances subject to the Japanese PRTR Law and of VOCs have been reduced 40% and 25%, respectively, from the levels it recorded in fiscal 2010.

- **Response to the Fluorocarbon Emission Restriction Law**: Promulgated in April 2015, the Fluorocarbon Emission Restriction Law is aimed at helping prevent the further destruction of the ozone layer and global warming by requiring the reduction of leaks of fluorocarbons used in commercial refrigeration and air conditioning equipment. The UBE Group is compliant with this law, and is working to reinforce its management of equipment covered by the law.

- **Polychlorinated Biphenyl (PCB) Management**: The UBE Group appropriately stores and manages PCB-containing equipment, including transformers, condensers and fluorescent lighting stabilizers, in its offices and factories in accordance with the Law Concerning Special Measures against PCB Waste. In accordance with the national government’s standards and plan for the disposal of waste containing PCBs, the Group is advancing the treatment of such waste in coordination with the Japan Environmental Storage & Safety Corporation and certified detoxification processing operators.

### Glossary

- **PRTR (Pollutant Release and Transfer Register)**: A registration system for emissions and transfers of chemical substances. 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 burden through the appropriate use and management of chemical substances.

- **VOCs (Volatile Organic Compounds)**: Organic chemicals that evaporate or sublimate easily, entering the atmosphere as gases. Includes a wide variety of substances, such as toluene and xylene. VOCs are one of the various causes of suspended particulate matter and photochemical oxidant pollution.

- **UBE’s 20 voluntarily selected chemical substances**: methyl alcohol, butyl alcohol, toluene, ε-caprolactam, cyclohexane, ammonia, vinyl acetate, xylene, N,N-dimethylacetamide, 2-hexanone, ethylbenzene, n-hexane, benzene, water-soluble zinc compounds, 1,3-butadiene, cis-2-butene, boron compounds, cyclohexanone, hexadecyltrimethylammonium chloride and dichloromethane.

- **U.S. government**: Of the 70 substances subject to the Japanese PRTR Law, these are the top ten by volume emitted by UBE along with dioxins.

### Emissions Volume of PRTR Substances

![Graph showing emissions volume over years](image)

<table>
<thead>
<tr>
<th>Ordinance Designation No.</th>
<th>Chemical Substance</th>
<th>CAS No.</th>
<th>Handling Volume</th>
<th>Total Emissions Volume</th>
<th>Increase/Decrease Rate Compared with Fiscal 2014 (Total Emissions)</th>
<th>Transfer Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>Toluene</td>
<td>108-88-3</td>
<td>796</td>
<td>78.5/21.2/0/0</td>
<td>99.7</td>
<td>179.4</td>
</tr>
<tr>
<td>76</td>
<td>ε-Caprolactam</td>
<td>105-60-2</td>
<td>137,756</td>
<td>0.0/69.9/0/0</td>
<td>69.9</td>
<td>361.9</td>
</tr>
<tr>
<td>80</td>
<td>Xylene</td>
<td>—</td>
<td>188</td>
<td>35.8/0.0/0/0</td>
<td>35.8</td>
<td>11.3</td>
</tr>
<tr>
<td>134</td>
<td>Vinyl acetate</td>
<td>108-05-4</td>
<td>6,976</td>
<td>26.5/0.0/0/0</td>
<td>26.5</td>
<td>0.0</td>
</tr>
<tr>
<td>53</td>
<td>n-Hexane</td>
<td>100-41-4</td>
<td>45</td>
<td>19.8/0.0/0/0</td>
<td>19.8</td>
<td>72.2%</td>
</tr>
<tr>
<td>392</td>
<td>Ethylbenzene</td>
<td>110-54-3</td>
<td>246</td>
<td>14.1/0.0/0/0</td>
<td>14.1</td>
<td>9.0</td>
</tr>
<tr>
<td>400</td>
<td>Benzene</td>
<td>71-43-2</td>
<td>420</td>
<td>7.7/0.1/0/0</td>
<td>7.9</td>
<td>35.6</td>
</tr>
<tr>
<td>213</td>
<td>N,N-dimethylacetamide</td>
<td>127-19-5</td>
<td>529</td>
<td>5.9/0.0/0/0</td>
<td>5.9</td>
<td>117.0</td>
</tr>
<tr>
<td>405</td>
<td>1,3-butadiene</td>
<td>—</td>
<td>56</td>
<td>0.1/3.4/0/0</td>
<td>3.5</td>
<td>1.6</td>
</tr>
<tr>
<td>389</td>
<td>Hexadecyltrimethylammonium chloride</td>
<td>112-02-7</td>
<td>2</td>
<td>0.0/2.2/0/0</td>
<td>2.2</td>
<td>22.2%</td>
</tr>
<tr>
<td>243</td>
<td>Dioxins</td>
<td>*</td>
<td>285.8</td>
<td>2.0/0.0/0/0</td>
<td>287.8</td>
<td>131.1%</td>
</tr>
</tbody>
</table>

**CAS No.**: Chemical Abstract Service registry number

**Unit for dioxins**: mg-TEQ/Year

* Contains various compounds

### Total Volume of PRTR Substances Emitted/Transferred in Fiscal 2015

<table>
<thead>
<tr>
<th>Handling Volume</th>
<th>Emissions Volume</th>
<th>Increase/Decrease Rate Compared with Fiscal 2014 (Total Emissions)</th>
<th>Transfer Volume</th>
<th>Number of PRTR Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmosphere</td>
<td>Public Water</td>
<td>Soil</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>UBE</td>
<td>265,049</td>
<td>101.7/89.2/0/0</td>
<td>190.9</td>
<td>(0.9%)</td>
</tr>
<tr>
<td>Other Group companies</td>
<td>31,424</td>
<td>93.3/9.0/0/0</td>
<td>102.3</td>
<td>4.3%</td>
</tr>
<tr>
<td>Total (UBE Group)</td>
<td>296,473</td>
<td>195.0/98.2/0/0</td>
<td>293.2</td>
<td>0.9%</td>
</tr>
</tbody>
</table>
Measures to Prevent Air and Water Pollution

Measures to Prevent Air Pollution
The UBE Group monitors pollutants at the source, and appropriate pollution control is undertaken based on levels established in agreement with governments and its own voluntary pollution prevention management standards. All of these measures are reflected in our factory operations.

Measures to Prevent Odors
The UBE Group is working together with governments on odor countermeasures, installing odor reducing equipment and building proprietary odor monitoring systems in the UBE District.

Measures to Prevent Water Pollution
The UBE Group has installed systems to monitor water pollutants in emissions to bodies of water. In addition, UBE Group factories, which can have a serious impact on public water quality, purify wastewater through the use of wastewater treatment facilities.

Emissions to the Air

<table>
<thead>
<tr>
<th>SOx Emissions(^1)</th>
<th>NOx Emissions(^2)</th>
<th>Dust Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(t/y)</td>
<td>(t/y)</td>
<td>(t/y)</td>
</tr>
<tr>
<td>'11</td>
<td>2,547</td>
<td>17,370</td>
</tr>
<tr>
<td>'12</td>
<td>2,847</td>
<td>16,304</td>
</tr>
<tr>
<td>'13</td>
<td>2,658</td>
<td>16,243</td>
</tr>
<tr>
<td>'14</td>
<td>2,012</td>
<td>16,281</td>
</tr>
<tr>
<td>'15</td>
<td>2,845</td>
<td>15,910</td>
</tr>
</tbody>
</table>

Emissions to Bodies of Water

<table>
<thead>
<tr>
<th>COD Emissions(^3)</th>
<th>Total Phosphorus Emissions</th>
<th>Total Nitrogen Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(t/y)</td>
<td>(t/y)</td>
<td>(t/y)</td>
</tr>
<tr>
<td>'11</td>
<td>806</td>
<td>17</td>
</tr>
<tr>
<td>'12</td>
<td>920</td>
<td>16</td>
</tr>
<tr>
<td>'13</td>
<td>889</td>
<td>15</td>
</tr>
<tr>
<td>'14</td>
<td>779</td>
<td>17</td>
</tr>
<tr>
<td>'15</td>
<td>737</td>
<td>12</td>
</tr>
</tbody>
</table>

Reference: Please refer to page 30 for environmental impact data by facility

*1., *2., *3. See the Glossary on page 30
Biodiversity

Private Business Partnership to Preserve Biodiversity
UBE supports Nippon Keidanren (the Japan Business Federation)’s “Declaration of Biodiversity by Keidanren,” and works as part of a related private business partnership to conserve biodiversity.

Environmental Study Meetings to Promote Activities
The UBE Group’s Environmental and Safety Principles state “the UBE Group shall act positively to protect and improve both community and regional conditions and work for the preservation of the global environment.”

The UBE Group has established Environmental Study Meetings as a horizontal Companywide organization. Through these meetings, we are working to understand and evaluate the impact of UBE’s business activities on biodiversity, gather and share information, and discuss the development of environment-friendly products and technologies and businesses.

In fiscal 2015, UBE Group Employees contributed approximately 1,600 man-hours to initiatives to preserve biodiversity, and the Group spent some ¥10 million on efforts that included forest maintenance and tree planting at former limestone quarries.

Forest Conservation Initiatives
In fiscal 2015, the UBE Group participated in the Eighth Forest Creation Experiential Activity for Water Conservation, sponsored by the Mine City Office of Yamaguchi Prefecture’s Agriculture, Forestry & Fisheries Department, with 131 employees taking part in the thinning and logging of bamboo over about two hectares. Furthermore, UBE employees participated in activities to protect and nurture the Akiyoshidai plateau in Mine (hosted annually by the Akago Area Community-Building Council). In addition, some of the management of forest and water sources undertaken by Yamaguchi Prefecture is supported by fees paid by UBE for the water it uses in its factories.

We are also implementing greening activities at former limestone quarries. Since fiscal 2008, we have planted citrus trees, vines, and other plants on the slopes of the Kanda Mine’s Taihei and Amakubo quarries. Since fiscal 2011, we have planted Wild cherry trees (Prunus jamasakura) and Round leaf holly (Ilex Rotunda) on the slopes of the Maruyama Quarry at the Isa Mine.

Protecting Biodiversity Together

Koji Kawauchi
Training Officer, Staffing Department
General Affairs Division, Ube City

We are surrounded by the plentiful benefits of biodiversity and nature. These benefits make possible many important aspects of our daily lives, such as our food, including rice, vegetables and fish; our health, including the changing scenery of the seasons that refreshes us; and various aspects of business, including pharmaceuticals and biomimicry technologies.

In March 2013, Ube City was among the first in the country to create a biodiversity preservation community alliance action plan, aiming to protect the rich natural environment of the area around Ono Lake area, which is the water source for the Ube and Sanyoymada areas, for future generations. Under this plan, we have worked together with environmental organizations and other parties to implement a wide range of biodiversity preservation activities.

In particular, in January 2016, we held a special citizen’s meeting on biodiversity under the themes of brainstorming together and the links between all creatures. This meeting served as a venue for matching human resources and funding between environmental organizations and corporate-sector interests and as a place for organizations to share information with one another. UBE kindly assisted us in holding this event. Let’s continue to advance biodiversity preservation efforts together in ways that are manageable, fun, and ongoing.
04 Consumer Issues

Customer and Business Partner Relationships

Product Safety Initiatives

- **Safety Data Sheet (SDS)**
  To ensure the safe use of our chemical products, we actively provide SDSs for all of our products to our customers and disclose SDSs for our main products on our website. In addition, employees can use our product SDS database, which contains information about product hazards and toxicity, relevant laws and regulations, use, storage, transport and disposal procedures.

  We update SDSs and product labels in light of country-specific laws (including those of the United States, South Korea and China), the EU’s REACH Regulation, CLP\(^*1\) and other relevant regulations as necessary.

- **Product Labels**
  A GHS label listing cautionary measures to be taken during handling is attached to every product container. Moreover, we have fully adopted the Container Yellow Card labeling system.

- **Transportation Safety**
  Based on the annual plans of the Group Product Safety Committee, we undertake measures to prevent transportation accidents and improve the quality of transportation operations. Such measures include maintaining Yellow Card\(^*2\) and transportation labeling systems as well as conducting disaster drills.

- **Response to Customers’ Green Procurement\(^*3\)**
  Particularly in the electric and electronic device and automotive industries, we are seeing advances in products designed for easier recycling and the reduced use of harmful materials. As a provider of raw materials, UBE responds enthusiastically to its customers’ green procurement efforts. With regard to its own raw materials procurement, the Company has set internal standards and monitors procured parts, materials and products for harmful materials.

- **Advance Safety Assessments of Chemical Substances**
  We conduct advance safety assessments of newly developed chemical substances and chemical substances that we will be handling in factories for the first time. In fiscal 2015, the UBE Group performed 27 advance safety assessments of chemical substances.

- **Participation in Chemical Safety Management Initiatives in Japan and Overseas**
  UBE actively gathers and communicates hazard information about its chemical products, taking part in the International Council of Chemical Associations (ICCA) HPV Program\(^*4\) and the Japan Challenge Program.\(^*5\) Since fiscal 2011, we have been participating in the Japan Chemical Industry Association (JCIA)’s Japan Initiative of Product Stewardship (JIPS), the domestic version of the ICCA’s GPS,\(^*6\)*\(^*7\) while promoting the gathering and communication of hazard information and risk assessments. The results of this participation include Safety Summary Sheets\(^*8\) for eight substances published on the GPS web portal.

Glossary

*1. CLP Regulation: A new EU regulation in addition to REACH pertaining to classification, labeling and packaging that facilitates the introduction of GHS within the EU. (CLP stands for Classification, Labelling and Packaging)
*2. Yellow card: A card for use in case of an accident during transport that displays product information, including product name, relevant laws, attributes, handling procedures, accident response procedures and emergency contact information
*3. 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
*4. High Production Volume Chemicals Program (HPV): An international chemical safety management initiative that gathers safety information about, conducts toxicity assessments of, and shares information regarding mass-produced chemical substances. Begun by the OECD, it is now carried out by the ICCA.
*6. Japan Initiative of Product Stewardship (JIPS): Voluntary risk management of chemical substances promoted by the JCIA
*7. Global Product Strategy (GPS): An initiative for voluntary chemical substance risk management promoted by the ICCA with the goal of minimizing the impact of chemical substances on the environment and people by 2020
*8. Safety Summary Sheet: A document summarizing the results of in-house chemical substance risk assessments that reflects the results of GPS initiatives, published on the ICCA’s GPS website
Quality Assurance

The UBE Group is developing global businesses in such fields as chemicals, pharmaceuticals, cement and construction materials and machinery.

To satisfy customers by providing stable, safe, reliable products, we take the initiative in quality assurance efforts tailored to each field.

Chemicals Company

Providing Assurance and Satisfaction through Companywide Quality Assurance Initiatives

In April 2015, the Chemicals Company organized a quality assurance department (the Chemicals Quality Assurance Department) under the direct control of the company president. Previously, we had carried out quality assurance activities at each manufacturing site, but we have now built a “Business Leading quality assurance” framework for the Chemicals Company that covers all activities in all factories as well as the sales division, technology center and engineering center. Under the framework, we brush up quality assurance activities by sharing customer information and demands precisely and speedily. To satisfy customers and ensure the reliability of our products and services in our global business, we have established the following Chemicals Company Quality Policy.

(1) We perform our social responsibility by observing the laws and social demands relevant to quality assurance and product safety.

(2) We implement the PDCA cycle speedily and surely in our Quality Management System to maintain the continuous development of our business.

(3) We identify customer demands correctly and take cross-functional QA action in our business to increase customer satisfaction and win customer confidence.

(4) We renovate “Monozukuri” technology to prevent quality problems and establish more stable quality processes.

(5) We continue making efforts to brush up our QMS with effective training, auditing and the “Change & Challenge” spirit.

To advance “Business Leading quality assurance,” we have begun by advancing QMS unification activities for four domestic factories (Ube, Fujimagari, Sakai and Chiba). As for group companies and overseas sites, their QMS are maintained independently. We are now working to renew ISO 9001 (2015 version) certification by the end of fiscal 2016. Furthermore, to meet customer demands, we are working to acquire ISO/TS 16949*1 and JIS Q 9100*2 certification for some of our businesses. For continual improvement, we will further strengthen cooperation with overseas sites and promote worldwide Quality Assurance activities, in line with the Chemicals Company Quality Policy.

Cement & Construction Materials Company

Striving to Provide Stable Quality

The Cement & Construction Materials Company meets a wide range of needs in such areas as civil engineering and construction both in and outside Japan with an extensive product lineup that includes ordinary cement, specialty cement and solidification agents. At our cement factories, we are working to expand the recycling of waste, including waste plastic chips, while rigorously enforcing quality management in line with ISO 9001. We strive to provide products that offer consistent performance with minimal variation in quality.

At the same time, given that we export roughly 30% of the cement and clinker we produce, we make adjustments as needed in response to changes in overseas standards, such as those of the ASTM,*4 BS-EN*5 and API*6 (for oil-based cement). We also work to share customer information and implement quality assurance initiatives.

Pharmaceutical Division

Committed to the Pharmaceuticals Quality Policy

To assure the efficacy, safety and quality of pharmaceutical products, consistent compliance with laws and regulations, spanning from manufacturing to sales and post-market safety measures, is necessary. The managers of our pharmaceutical business have fully committed to our Pharmaceuticals Quality Policy in order to meet such strict pharmaceutical quality requirements.

Furthermore, to realize this policy, we have set up concrete initiatives under a PQS.*3 We comply with relevant regulatory requirements, ensuring that production sites enforce manufacturing and quality management. At the same time, we appropriately operate and constantly improve the PQS. In these ways, we secure customer satisfaction and external trust.

In April 2015, the Chemicals Company organized a quality assurance department (the Chemicals Quality Assurance Department) under the direct control of the company president. Previously, we had carried out quality assurance activities at each manufacturing site, but we have now built a “Business Leading quality assurance” framework for the Chemicals Company that covers all activities in all factories as well as the sales division, technology center and engineering center. Under the framework, we brush up quality assurance activities by sharing customer information and demands precisely and speedily. To satisfy customers and ensure the reliability of our products and services in our global business, we have established the following Chemicals Company Quality Policy.

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Glossary

*1. ISO/TS 16949: A quality management system for the automotive industry
*2. JIS Q 9100: A quality management system that includes requirements of the aerospace and defense fields
*3. PQS: Pharmaceutical Quality System
*4. ASTM: American Society for Testing and Materials
*5. BS-EN: British Standards Institution-European Standards
*6. API: American Petroleum Institute
*7. ASME U-Stamp: The American Society of Mechanical Engineers U-Stamp (Boiler and Pressure Vessel Certification)
Fair Business Practices

**Compliance**

- **Measures to Ensure Compliance**
  A company and the executives and employees that work there must provide value for society. In addition to the basics of not engaging in illegal activities, such as forming unsanctioned cartels or engaging in improper accounting, a company must maintain a firm sense of ethics and comply with laws and other social rules.
  
  To live up to the trust and expectations of its stakeholders, the UBE Group maintains an effective system for ensuring compliance and is working to enhance such measures as helping its employee understand the essence of compliance.

- **Compliance Policy and Standards**
  **UBE Action Guidelines (see page 16)**
  The UBE Group has established the UBE Action Guidelines, comprising nine chapters, as a code of conduct for all its executives and employees to follow in their daily work. The guidelines have been distributed in booklet form to all members of the Group. The guidelines, together with additional explanations and examples of how they might apply in real situations employees could encounter, are made available on the Group intranet.
  
  Through these and other measures, the Group promotes awareness of and compliance with the UBE Action Guidelines.

- **Protection Against Antisocial Elements**
  The UBE Group clearly states its Basic Policy with Regard to Anti-Social Elements to the Group and the world. This policy states that, to ensure the safety and soundness of civil society, the UBE Group will neither maintain relations with nor bow to improper demands from antisocial elements. Furthermore, the Group takes measures to ensure that even in the event of unintentional dealings with antisocial elements it can swiftly end such relationships, for example, by including cancellation clauses in contracts with suppliers that allow it to cease transactions if the supplier is found to have relationships with antisocial elements. The Group promotes coordination with local police and works to collect information that will facilitate its proper response to any contact from antisocial elements.

- **Compliance System**
  **Organization**
  UBE has established compliance officers (COs), *1 who are responsible for ensuring compliance throughout the Group, as well as the Compliance Promotion Secretariat, *2 which develops and implements compliance-related measures. Furthermore, to help ensure compliance, the Compliance Committee, *3 an advisory body to the COs, approves annual compliance plans, confirms their implementation, exchanges information about compliance violations and considers preventive measures.

  **Number of Internal Notifications in Fiscal 2015**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Violations of business procedures</td>
<td>5</td>
</tr>
<tr>
<td>2. Bullying, sexual harassment, etc.</td>
<td>3</td>
</tr>
<tr>
<td>3. Other</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Compliance Law Compliance Initiatives**
  In 2014, the UBE Group established the Competition Law Compliance Committee to create systems to prevent cartel activity and other such issues in line with competition law in and outside Japan. In particular, because meetings between sales employees and other companies in the same business as their own may lead to cartel activity, such employees must obtain prior approval for such meetings from their managing division and submit a report afterward. Through these and other measures, UBE has adopted rules to ensure that potential violations are nipped in the bud.

- **Control of Restricted Cargo**
  The UBE Group maintains that the basic purpose 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. We strive to promote awareness of related issues throughout the Group.

- **Group Consultation Hotline**
  UBE has established a Group Consultation Hotline through its divisions that handle environment and safety, intellectual property, labor issues and other such areas important to compliance. By enabling easy consultation regarding questions and possible compliance issues that arise in the course of day-to-day operations, we aim to stop compliance violations before they become serious.

- **Internal Reporting System (UBE C-Line)**
  We have established compliance hotlines (the UBE C-Line) inside and outside the Group, aiming to quickly uncover and resolve actual or potential compliance-related problems in the UBE Group by enabling anyone who discovers such a problem to report it directly. Reports received through UBE C-Line are handled by the Compliance Promotion Secretariat, which works in cooperation with the parties involved to conduct rapid and careful fact gathering and work toward a solution.

UBE Group CSR Report 2016 42
Internal instructors hold compliance workshops at UBE Group offices, facilities and Group companies. I am the instructor for Ube Material Industries, Ltd.

The content of these workshops is basically the same throughout the Group, but I adjust it somewhat for the specific needs of my company and include lots of real examples. Every year, we select areas to hold the workshops, and in fiscal 2015 we held them 19 times, with 331 participants.

As part of the workshops, we play DVDs of skits made specifically for each division, such as manufacturing and sales, and these have been well received. However, many employees find the more general explanations of compliance difficult to understand.

Nevertheless, given the frequency of corporate scandals in the world, the content we discuss comprises the minimum that all our employees, as members of the UBE Group, need to understand, so reducing the content covered is not on the table. We must therefore find ways to make training understandable, even when dealing with difficult topics.

Aiming to ensure that every single employee can proactively maintain compliance, we will continue our proactive compliance promotion activities, such as regularly posting compliance newsletters on the company intranet and conducting training for new employees.

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**Compliance System**

- **Group CEO (President)**
- **Compliance Officers**
  - Competition Law Compliance Committee
  - Compliance Committee
- **Compliance Promotion Secretariat**
  - Internal Reporting System (**UBE C-Line**)
  - Counselor System
    - **Sexual harassment**
    - **Bullying**

**Overview of Systems Ensuring Compliance**

*1 Compliance Officers (CO)*
Two executive officers 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.

*2 Compliance Promotion Secretariat*
This unit administers compliance-related activities under the direction and supervision of the COs.

*3 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) is invited to serve as an outside committee member.
Over 380 Patents received

We aim to increase the use of eco-friendly copy paper to 100%; UBE’s ing stationery goods, copy paper, work uniforms, toner and other supplies.

In line with the Law on Promoting Green Purchasing, the UBE Group

Appropriate to Green Purchasing*1

Policies shown below.

UBE regards its suppliers as valuable partners and works to build fair and honest relationships with them to promote the sustainable development of one another and society. UBE’s purchasing adheres to the Basic Purchasing

Purchasing Policies

UBE Engages in Purchasing That Thoroughly Adheres to Its Purchasing Policies

UBE regards its suppliers as valuable partners and works to build fair and honest relationships with them to promote the sustainable development of one another and society. UBE’s purchasing adheres to the Basic Purchasing Policies shown below.

Approach to Green Purchasing*1

In line with the Law on Promoting Green Purchasing, the UBE Group encourages its employees to choose eco-friendly products when purchasing stationery goods, copy paper, work uniforms, toner and other supplies. We aim to increase the use of eco-friendly copy paper to 100%; UBE’s

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 relationships of trust on 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 relevant laws and regulations and with social norms, and we will protect all confidential information obtained through our purchasing activities.

Green Procurement and Purchasing

We will give due consideration to environment-friendliness in our product selection and purchasing activities.

Patent infringement can lead to serious problems, such as the suspension of product manufacturing or demands for large compensatory payments. The infringement of other companies’ valid rights is, of course, also a problem in terms of CSR, so we carefully examine other companies’ patents and the scope of their rights. To engage in business that falls within the scope of the rights of another company, we may attempt to license the rights or legally nullify the patents in question. However, these methods take time and money and are not guaranteed to succeed. UBE therefore works to steadfastly protect its own network of patents so that it can engage in business outside the scope of other companies’ patents.

In recent years, there has been greater demand to use means other than patents to address intellectual property issues, such as preventing unfair competition and protecting trade secrets and copyrights. We are working to respond to such changes in international business conditions.

Incentive System

To encourage new inventions and facilitate the smooth usage of intellectual property rights, UBE has established internal rules compliant with the Revised Patent Law regarding employee inventions and pays multiple types of monetary rewards to inventors. Rewards based on actual business results serve as a barometer indicating the extent that a patent is being put to effective use in business. The ongoing creation of numerous incentivized patents is essential to the strong growth and development of UBE’s business.

UBE is advancing CSR procurement at all stages of the supply chain, including with suppliers, to increase its social credibility.

The UBE Group gives priority to suppliers that meet the following criteria.

- Have in place an internal framework for promoting CSR
- Emphasize quality and maintaining a stable supply
- Conduct business in a fair manner that honors corporate ethics, laws and societal standards
- Prioritize environmental considerations
- Exercise respect for human rights and safety and hygiene management
- Emphasize contributing to and communicating with society as well as information management and disclosure

UBE Group CSR Report 2016
**Community Involvement and Development**

**Information Disclosure and Communication**

**Relationships with Shareholders and Investors**

- **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 disclose information in a timely, appropriate and fair manner. In addition, we are actively increasing opportunities for interactive communication with market participants, such as shareholders, investors and securities analysts, thereby promoting mutual understanding and incorporating market perceptions and evaluations into our management.

  The following were the main IR activities conducted in fiscal 2015.

  - 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 days that quarterly results were announced)
  - Results briefings for individual investors (two times)
  - Overseas IR (individual visits to institutional investors in Europe, the United States and Asia, three times)
  - Small-scale meetings held with the President (four times)
  - Individual meetings with institutional investors and securities analysts (approximately 200 during the year)
  - Facility tours (three times) and business briefing sessions (one time)
  - The 109th General Meeting of Shareholders (1,494 attendees)

  UBE creates many opportunities for direct dialogue with investors in and outside Japan, including conferences and individual meetings. In addition, UBE also provides a wide range of information through its website.

  Furthermore, in the semiannual UBE Business Report for individual investors, UBE’s business content and strategies are explained in an easy to digest format. UBE will continue to adhere to its commitment to timely, appropriate and fair information disclosure, and it will enhance interactive communication with stakeholders.

- **Shareholder Returns (Dividend Policy)**
  In principle, UBE seeks to maintain a consolidated dividend payout ratio of at least 30% while also seeking to maintain and increase its financial soundness, enhance shareholders’ equity in preparation for future investments and ensure stable dividends.

**Main External Awards and Recognitions (Fiscal 2015)**

- **Overall CSR**
  | Ratings | Japan Credit Rating Agency, Ltd.: A-Rating and Investment Information, Inc.: A- |

- **Human Resources**
  - **June 2015**
    Received Production Technical Award in the 55th Society of Inorganic Materials, Japan Awards
    Recipient: Kiyoharu Hironaka, Technical Development Center, Cement & Construction Materials Company
  - **September 2015**
    Received an award from the Ministry of Health, Labour and Welfare as an excellent business in the provision of employment for people with disabilities
    Recipient: Shinjiro Arita and Hiromi Ochi, Libertas Ube, Ltd.
  - **October 2015**
    Received a Fulrath Award from the American Ceramic Society
    Recipient: Tadashi Matsuura, Polyimide and Specialty Products Business Unit
  - **October 2015**
    Received the gold and bronze prizes in desktop publishing in the 2015 Yamaguchi Prefecture Ablumipics
    Recipients: Hiroshi Shibata (gold) and Yuki Murakami (bronze), Libertas Ube, Ltd.
  - **October 2015**
    Received 2015 President’s award for effort from the Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers as an excellent business in the provision of employment for people with disabilities
    Recipient: Masaki Yamagata, Libertas Ube, Ltd.
  - **November 2015**
    Received a Contemporary Master Craftsmen (Gendai no Meiko) award
    Recipient: Tsutomu Okusa, Ube Steel Co., Ltd.

- **Environment, Safety and Technology**
  - **May 2015**
    Received the 39th JCIA Annual Safety Award First Prize from the Japan Chemical Industry Association
    Recipient: Corporate Research & Development Division (Ube District)
  - **May 2015**
    Received the 2014 Technology Advancement Prize (new products, technologies and applications division) from the Japan Fine Ceramics Association
    Recipient: (the former) Inorganic Specialty Product Research Laboratory, Corporate Research & Development Division
  - **June 2015**
    Received a 2014 Tanaka Award (excellence in bridge design and construction category) from the Japan Society of Civil Engineers
    Recipient: GENTA Bridge, Tottori City (renovated by a joint venture between Fuji P.S. Corporation, Ube Machinery Corporation, Ltd. and Kounogumi Corporation)
  - **July 2015**
    Received the 4th Green & Sustainable Chemistry Encouragement Award
    Recipient: The development of durable water-borne polyurethane coating materials (PU)D
  - **July 2015**
    Received recognition for excellent cooperation from the Ube Sanyo-Onoda Fire Department
    Recipient: Ube Chemical Factory
  - **March 2016**
    Received the Excellent Paper Award from the Mining and Materials Processing Institute of Japan
    Recipient: Technical Development Center, Cement & Construction Materials Company (for joint research with the Niinae laboratory of the Yamaguchi University Graduate School of Science and Engineering)
Responsible Care (RC) Regional Dialogue Meetings

Local member companies of the Japan Chemical Industry Association (JCIA) RC Committee hold RC Regional Dialogue meetings every two years in each of the Committee’s districts with the purpose of building relationships of trust with local residents. UBE’s chemical factories are members in the Yamaguchi western district, the Sakai/Senboku district and the Chiba district. In fiscal 2015, the 10th RC Regional Dialogue Meetings were held in the Yamaguchi western district and the Sakai/Senboku district in November 2015 and February 2016, respectively.

Furthermore, in addition to the biannual RC Regional Dialogue meeting, the members in the Ube district hold an RC Regional Dialogue Conference every year, providing a valuable forum for interaction between industry, government, academia and the public. The 13th annual RC Regional Dialogue Conference in the Ube district was held in February 2016, bringing together 54 attendees. Following an explanation of RC activities undertaken in the last year by participating companies, the Environmental Policy Office of the Ube City Environmental Department gave a presentation on environmental preservation initiatives in Ube City. Afterward, group discussions on process safety and disaster prevention and odor pollution were held.

Going forward, we will continue to prioritize dialogue with local communities and implement RC activities to foster harmonious coexistence and mutual development with local communities.

Hosting Local Events

The Ube Chemical Factory held the 10th UBE Chemical Summer Festival in August 2015, welcoming more than 2,900 people, including nearby residents and families. The event featured a stage show by UBE employees, a yosakoi dance and a performance by the UBE Kosan Mixed Chorus Group.

Tours of Local Industrial Facilities

The UBE Group once again participated in tours of local industrial facilities entitled “Social Tours for Grownups” in fiscal 2015. These tours are conducted by a local council established to promote industrial tourism in the cities of Ube, Mine and Sanyoonoda. Various tours were undertaken at UBE Group facilities, with 1,736 participants. Activities included a tour showcasing the production of cement (Isa Cement Factory and highlighting roads used exclusively by UBE) and another highlighting the Okinoyama Coal Mine and its founder Sukesaku Watanabe (UBE-i-Plaza and the Okinomiya Coal Mine electric powered mine shaft).
Participation in Local Events (Main Events)
UBE’s offices and facilities participate in various local events to promote harmonious coexistence with local communities.

Chiba Prefecture: 2015
June: UBE participated in a campaign to promote seatbelt use.
June: 12 UBE Group employees participated in the Goi-Rinkai Festival.

Yamaguchi Prefecture: 2015
July: 137 UBE Group employees, divided into 15 teams, competed in the 22nd Annual Ube City Marine Day Cutter Race.

Other Community Activities
At all our offices and facilities, we strive to promote harmonious coexistence with local communities through such efforts as the cleanup of areas near our facilities and participation in blood donation programs.

Local Newsletter Tsubasa
Since November 2012, the UBE Group has been issuing Tsubasa, a newsletter for local residents. This newsletter is distributed twice a year to residents of Ube, Yamaguchi Prefecture, where the UBE Group was founded. It is delivered directly to people’s mailboxes, inserted in newspapers, and offered through UBE-i-Plaza and other venues. Since May 2014, UBE has offered a special online version of Tsubasa on its website that includes comments and perspectives from the authors and people involved that could not be included in the print version.

UBE-i-Plaza
In 2007, to mark the Group’s 110th anniversary, UBE-i-Plaza was established as the UBE Group’s comprehensive information center in the Ube District, where the Group was founded. In the center’s presentation room, visitors may watch videos about the UBE Group’s history and businesses. The display room provides an overview of the Group’s past, present and future and is divided into zones with the themes of corporate history, products and technologies, cutting-edge technology, organization and activities, and the future. In fiscal 2015, the center received 7,891 visitors.

Business Facility Tours
We invite various stakeholders, beginning with nearby schools, to tour our business facilities. In July 2015, the Chiba Petrochemical Factory held a facility tour for 80 local elementary school students. The Sakai Factory held facility tours for technical college students in October 2015 and for technical high school students in January 2016, for a total of 113 participants, and in May 2015 it invited 34 local residents for factory tours and discussions. Furthermore, in August 2015, the Tokyo Head Office held its first family workplace tours.

Clean up of public roads (Kanda Cement Factory)
Family workplace tour (Tokyo)

UBE’s booth at the Yamaguchi Jamboree Festa, held at the same time

UBE Group CSR Report 2016
Social Contribution

Support of Culture and Art

UBE supports the activities of the UBE Foundation and the Watanabe Memorial Culture Association in the form of regular donations and human support.

The UBE Foundation

The UBE Foundation (Director: Michio Takeshita) 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 1997. In 2010, the UBE Foundation was certified as an organization operating in the common interest by the Japanese Cabinet Office and registered as a foundation incorporated in the public interest. 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 2015, the 56th annual Ube Foundation Grant was awarded to 12 researchers from a total of 135 applicants. At the awards ceremony, held in June 2016, Professor Masatsugu Shimomura of the Chitose Institute of Science and Technology gave the keynote address, entitled “The Latest Trends in Biometrics.”

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: Michio Takeshita) was registered as a foundation incorporated in the public interest in October 2014. The association promotes the welfare of the citizens of Ube City and supports a variety of cultural and art-related activities that include efforts to bolster local culture as well as lectures and concerts. In October 2015, the association hosted a community concert with the Japan Philharmonic Orchestra. The association donated a total of ¥800,000 to the Watanabe Memorial Book Collection and the Watanabe Memorial Culture Association Picture Book Collection in February 2016. The Watanabe Memorial Book Collection, established in the Ube City Library in 1953, contains 2,236 volumes, primarily in the field of art. Moreover, the Picture Book Collection, which lends books to kindergartens and childcare centers, has reached 4,546 volumes. In April 2016, the association donated funds to support seven selected cultural organizations in the UBE District.

Support of Culture and Art

In 2015, we invited the Japan Philharmonic Orchestra to perform the 8th annual UBE Group Charity Concert. We also opened the Charity Concert’s dress rehearsal, free of charge, to about 600 students from local elementary and junior high schools and 40 students from local schools for the disabled and their respective guardians and teachers. Furthermore, in cooperation with Pioneer Corporation, we installed that company’s systems for experiencing sound through vibrations felt through the body in certain seats, allowing hearing impaired audience members to experience the concert. All of the proceeds from the concert were donated to local organizations and schools. Specifically, five municipal junior high schools in Ube City were each given a wind instrument, while the Ube City Folk Orchestra and the Ube Music Appreciation Society received monetary donations.

The day before the performance, members of the Japan Philharmonic Orchestra participated in a “hands-on concert” for patients admitted to Ube Industries Central Hospital and the Yamaguchi University Hospital.
Education and Social Contributions

Chemistry Experiment Events for Children
Every year, UBE invites schoolchildren to attend chemistry experiment programs aimed at helping children experience the fascinating world of chemistry by introducing them to UBE’s advanced technologies. In July 2015, the Advanced Energy Materials R&D Center hosted the 27th Annual Summer Holiday Junior Science Lesson in Ube Industries in Ube City. Participants learned about batteries and then competed to make the best one.

In addition, the Organic Specialty Materials Research Laboratory and UBE-MARUZEN POLYETHYLENE Co., Ltd. held hands-on experiment events in which participants made kaleidoscopes using polyethylene film in August at the 2015 Dream/Chemistry-21 Children’s Chemistry Experiment Show in Chiyoda City, Tokyo.

Volunteering in Afforestation and Flower Campaigns
In November 2015, the UBE Group participated in the Eighth Forest Creation Experiential Activity for Water Conservation, held in the Akiyoshidai International Art Village and sponsored by the Mine City Office of Yamaguchi Prefecture’s Agriculture & Forestry Department, with 99 employees taking part in the thinning and logging of bamboo. These activities help to improve the water retention of the woodlands around Ono Lake, an important source of water for local residents and companies, and prevent flooding. In addition, the gardens planted every year by employees within the premises of UBE Group sites won eight awards in flowerbed contests held by Ube City in fiscal 2015.

Main Internships (fiscal 2015)

<table>
<thead>
<tr>
<th>Company</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo Head Office</td>
<td>10</td>
</tr>
<tr>
<td>Ube Chemical Factory</td>
<td>8</td>
</tr>
<tr>
<td>Chiba Petrochemical Factory</td>
<td>6</td>
</tr>
<tr>
<td>Sakai Factory</td>
<td>3</td>
</tr>
<tr>
<td>Ube Cement Factory</td>
<td>3</td>
</tr>
<tr>
<td>Isa Cement Factory</td>
<td>5</td>
</tr>
<tr>
<td>Kanda Cement Factory</td>
<td>1</td>
</tr>
<tr>
<td>Electric Power Business Unit</td>
<td>3</td>
</tr>
<tr>
<td>Research centers (UBE)</td>
<td>1</td>
</tr>
<tr>
<td>Ube Corporation Europe, S.A.U.</td>
<td>32</td>
</tr>
<tr>
<td>Libertas Ube, Ltd.</td>
<td>10</td>
</tr>
<tr>
<td>Ube Machinery Corporation, Ltd. and other Group companies</td>
<td>56</td>
</tr>
</tbody>
</table>


**Initiatives in Spain**

- **Science Study Promotion and Relations with Universities**
  The UBE Group in Spain has been active in promoting the study of science, taking part in and providing support to initiatives by schools and universities in the Castellón region. Expo Science 2015 took place in May 2015, organized by the University of Valencia’s Scientific Park, where UBE conducts R&D programs. Our company’s booth introduced polymeric materials through games and exhibits and was visited by over 500 young children with their parents. In addition, some 50 high school students from the Science Summer Camp of Jaume I University visited us to learn about the daily job of a chemistry graduate at UBE, and 35 students of the University of Valencia and Polytechnic University of Valencia visited the plant to learn about our process control systems and our innovation activities in engineering plastics.

  Once again, we sponsored “The Pleasure of Doing Research,” a contest for technical high school students, and a master course on energy efficiency in manufacturing industries, both organized by Jaume I University, as well as the Electric Car Team of Benicarló (Castellón) High School.

  UBE employees have given lectures about human resource management at the National Student Congress of Labor Relations and about business culture in Japan and Spain to the students of a Master of English Language for International Trade program. Employees served as special participants in a focus study group at Jaume I University to discuss the relationship between transparent communication about R&D and ethics in the corporate world.

- **Support for Education and Culture**
  Our company sponsored the “Seminar series for good environmental practices at home,” organized by Almazora Town for local families, as well as soccer, volleyball, basketball and other sports clubs, contributing to the healthy growth of the local youth. In terms of culture, our support went to events like the Castellón city festivals; the annual regional contest for young artists organized by a Castellón school; the exhibit Datamatics by the Japanese artist Ryoji Ikeda at Castellón Contemporary Art Space; and the Tarrega classical guitar contest of Benicasim City. Local NGOs, like Afanías, Down Syndrome Foundation, and the Red Cross Society, also received UBE’s sponsorship.

  In addition, Caritas Internationals received six discarded computers, upgraded and fixed by UBE, to be used in their computer school to train people to use the computer tools necessary to search for and reply to job offers.

- **Other Social Contribution Activities**
  Internally, the company continued its support for various programs organized as volunteer activities by employees, such as blood donation, used mobile phone collection and plastic bottle cap recycling. In addition, the “Family Plan,” a new program held every two years, was started to offer counseling and guidance to disabled children or other relatives of five of our employees, supporting them in order to improve their development, autonomy and social and occupational inclusion.

**Overseas Initiatives**
Initiatives in Thailand

Interacting with Local Communities
Protecting the Natural Environment
The UBE Group’s Asia Operational Unit (AOU) plans and supports activities to protect the natural environment in the local area. On May 9, 2015, our employees and several community groups, for a total of 107 people, constructed a weir and embankment for wildlife near the Ban Nam Kroii Ranger Station of Khao Chamao-Khao Wong National Park in Rayong.

Village Cleanup Activities
To mark World Environment Day on June 5, 2015, we held an event titled “Big Cleaning Day.” 70 participants, comprising local villagers, students, members of the Thai navy and 10 of our employees, gathered to clean up a nearby village.

Coastal Cleanup
On September 11, 2015, 65 AOU employees together with employees of other companies in the industrial estate, for a total of 500 people, participated in beach cleaning activities at a beach near our plants.

Support for Education and Culture
Science Lesson for Local High School Students
On July 13, 2015, we held a one-day workshop in collaboration with the Chulalongkorn University Faculty of Science to provide an opportunity to experience basic chemistry for high school students at Phetkasamawittaya School in Rayong. 10 instructors and 75 students attended.

National Research Contest
UBE Group (Thailand) organized a National Research Competition called “Thailand Computational Chemistry Challenge by UBE” with collaborative support from the Chulalongkorn University Department of Chemistry and the National e-Science Infrastructure Consortium. The aims of this activity are to motivate students and researchers in Thailand to utilize their research and technological capabilities, such as those in computational chemistry, in solving actual national issues and to promote the company’s vision.

17 proposals were submitted for competition. The winning project was titled “A Computational Insight on the Role of CNT as Reinforcement Filler in Filled Natural Rubber.” A trophy was presented by Princess Chulabhorn Walailak to the winners at the Pure and Applied Chemistry International Conference 2016 (PACCON2016), which was organized as a special event on February 9, 2016.
Our plant started its activity in the late 1960s in the manufacture of caprolactam and ammonium sulfate. Today, we also produce such products as polyamides, PCD, PDL and higher value ammonium sulfate products. We have learned from our antecessors, and we are facing now the new business rules of the market with the "Change & Challenge" spirit while maintaining close contact with local communities.

The EHS & QA Department contributes to the company by promoting, planning, supporting and monitoring initiatives through our internal management system with the goal of evolving to a world class company in terms of safety, environmental care and quality.

In 2012 we launched a Safety Strategic Plan focused on the improvement of safety culture and process safety. Since then, more than ten teams, involving all the UCE staff, have been participating to develop these topics. Our motto is “Lead by example. Be an example in your team.”

From an environmental point of view, UCE has implemented energy reduction projects that have reduced its emissions by 24% since 1999.

UCE has carried out environmental campaigns in order to increase awareness among employees, and it is leading the “environmental code” of the Responsible Care program in Spain.

Quality of products and services is a core value for UBE and it is our competitive advantage. In 2015 we launched a QA Strategic Plan with the goals of improving our management system, getting the best tools for customer (internal and external)-oriented work, taking advantage of our know-how and leading the company toward agile team work.

Finally, risk management is also one of our main tasks. We help the company assess the risk level of its activities, including business, production and maintenance, in order to formulate and implement risk mitigation plans in an effective and efficient way.

In terms of production, we have a variety of products and technologies. As a result, we have released energy-saving grab buckets that emit 28% less CO₂ by reducing the amount of hydraulic oil discharge. In recognition of these technologies, this product received the Creative Award in the 2nd Annual Utsukushima Manufacturing Awards given by Fukushima Prefecture. Such products are part of our efforts to address global warming.

In recent years, we have worked to develop more environment-friendly products. As a result, we have released energy-saving grab buckets that emit 28% less CO₂ by reducing the amount of hydraulic oil discharge. In recognition of these technologies, this product received the Creative Award in the 2nd Annual Utsukushima Manufacturing Awards given by Fukushima Prefecture. Such products are part of our efforts to address global warming.

In terms of production, we have a Kaizen (constant improvement) Corner in each building of our plant and a Kaizen Showroom at our Production Headquarters as places to discuss ways to improve manufacturing and product quality on a regular basis. Through such efforts, we strive to provide high-quality, safe products and services.

Furthermore, to contribute to local communities, we actively offer experiential opportunities for students to learn about manufacturing, conduct various factory tours, accept students in vocational training as interns and implement other community-based activities.

Going forward, we will continue business activities rooted in local communities, aiming to achieve our environmental policy of promoting the harmonious coexistence of business with a beautiful Earth, nature and the environment.
As the mother factory for the chemical business, this factory produces a wide range of products, with due consideration given to the environment, product quality, safety and operating stability. The factory houses a number of complex plants handling a wide range of chemical substances. Accordingly, to help all employees comply with basic rules and principles while teaching them to think for themselves, in April 2014 we established the Chemical Training Center, bringing together all of the factory’s experiential training equipment. We are using the center to help promote communication between employees. By strengthening various risk assessments, these efforts are also helping to improve facilities and operations, reinforce the self-managed process safety system, and further reduce chemical substance emissions.

Location: 8-1 Gō Minami Kaigan, Ichihara City, Chiba Prefecture
Start of operations: 1964
No. of employees: 281
Main products: Polyethylene, polybutadiene rubber, waterproofing materials

The Chiba Petrochemical Factory is located in the Keiyo Industrial Zone. We produce petrochemical products that support people’s lives. To fulfill our promise to ensure the safety and security of local communities and customers, we strive to anticipate every possible risk and promote related prevention measures. Regarding our environmental initiatives, we are significantly reducing the factory’s environmental impact by ceasing the use of highly harmful solvents and putting in place countermeasures in such areas as exhaust gas and the incineration of waste solvents in boilers. In addition, we regularly monitor the water and gas discharged from the factory, striving to identify irregularities early on. With the aim of encouraging interaction between the local community and UBE, we participate in the Gōi-Rinkai Festival, hold factory tours for local elementary school students and engage in other events. Through such efforts, we support active exchange with the local community. 2014 marked the factory’s 50th anniversary. Going forward, we will continue to contribute to the development of the local community.

Location: 3-1 Chikko Shinmachi, Nishi-ku, Sakai City, Osaka
Start of operations: 1967
No. of employees: 222
Main products: Polyamide, separation membranes, electrolyte solutions, separators

Our factory is located in Sakai City, which, as an environment-friendly model city, has announced the “Cool City Sakai” concept. The factory manufactures chemical products and specialty products and is taking proactive steps to conserve energy and resources. In February 2016, we held a Responsible Care Regional Dialogue Meeting in the Sakai/Senboku district, interacting with a great number of local residents. Going forward, we will continue aiming to contribute to the local community through dialogue with local residents and cooperation with the government while maintaining safe and secure operations. In July 2016, we completed the Osaka R&D Center on the factory premises. This is UBE’s first new research facility in 20 years. Conducting integrated R&D ranging from battery materials and other functional products to production technologies, this center aims to operate as a central base for efficient product creation.

Location: 2575 Fujimagari, Ube City, Yamaguchi Prefecture
Start of operations: 2013
No. of employees: 99
Main products: Ammonia, liquid carbon dioxide

This factory was established in October 2013, taking over the factory operations of Ube Ammonia Industry, Ltd., which had been in operation since 1969. With operations that, among the Ube District factories, are the furthest upstream along the value chain, the Ube-Fujimagari Factory is the only factory in Japan that produces ammonia, an ingredient of lactam and nylon chains, from petroleum coke. In fiscal 2014, the factory received Accreditation of Completion and Process Safety Inspection in accordance with the High Pressure Gas Safety Act. Accordingly, it is now subject to periodic inspections every two years, rather than every year. All employees work together and with partner companies to maintain safe, stable operations and are aiming to achieve a second consecutive year of uninterrupted operations while maintaining zero occupational accidents and zero environmental irregularities. Going forward, we will continue to enhance our safety technologies as we strive to provide peace of mind for the local community.

Location: 1978-2 Kogushi, Ube City, Yamaguchi Prefecture
Start of operations: 1923
No. of employees: 238
Main products: Cement, limestone

The Ube Cement Factory is a manufacturing and shipping base for cement and limestone products produced in the Ube and Isa regions. At the same time, this factory produces specialty cement that meets various customer needs. We use waste plastic chips and wood biomass as alternative fuels in our cement manufacturing processes and actively work to save energy as part of regular efforts to realize a low-carbon society. Through the provision of cement and reuse of waste materials and byproducts in cement manufacturing, the factory contributes to recovery from earthquakes and other disasters, helps prevent and mitigate future disasters, helps address the problem of aging infrastructure, and promotes the creation of a recycling society. In addition, with the aim of making this the safest cement factory in Japan, all employees work together and with partner companies to prevent operational accidents and accidents related to process safety.

Location: 4768 Isa, Isa-cho, Mine City, Yamaguchi Prefecture
Start of operations: 1948
No. of employees: 232
Main products: Cement, limestone

Located in Mine City, home of Akiyoshidai 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. With our factory and mine situated close to the local community, we have established and operate within voluntary managerial targets that are stricter than existing laws and regulations in such areas as noise, vibrations and water discharge. We also recognize the importance of maintaining smooth communication with 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. In recent years, we have received favorable reviews for tours of our industrial facilities, which highlight roads used exclusively by UBE.
The Kanda Cement factory is a leader in waste processing. After installing a world-class high-chlorine bypass system in 2005, in 2012 we commenced operations of facilities that process waste plastic, removing chlorine and solidifying it to produce a source of energy that is on par with coal. Furthermore, in December 2015, the factory’s exhaust heat power generation facilities came online. Since its founding, the Kanda Cement Factory has striven to beautify and contribute to the greenery on its grounds. In recent years, we have also worked to green former mining sites, undertaken cleanup activities along public roads around the factory and actively accepted guests for facility tours. Through these efforts, we are working to promote harmonious coexistence with local communities.

Although UBE started out in the coal mining business, the Company completely withdrew from such operations in 1977, having closed the Okinoyama Coal Mine in 1967. However, in 1980 the Okinoyama Coal Center commenced activities focused on such coal-related businesses as operating Japan’s largest fuel coal import transshipment station (annual amount handled: 6 million tons), which provides a stable supply of coal, an important energy source for Japan. In particular, the importance of coal as fuel for thermal power generation has been reevaluated in light of the suspension of nuclear power generation since the Great East Japan Earthquake. Aiming to maintain the trust of the local community, we are working in unison with employees and partner companies in the areas of health and safety, environmental preservation, and process safety and disaster prevention.

UBE Machinery Corporation marked its 100th anniversary in 2014. We continue to evolve the company’s manufacturing prowess, which has been handed down over generations. By doing so, we are reinforcing our ability to meet diversifying needs. We are integrating and globalizing manufacturing, sales and service operations, and delivering valuable products that satisfy the expectations of customers around the world. At the same time, through technological innovation, we are further advancing the development of environment-friendly products and reducing the environmental impact of our manufacturing and service operations. Our fundamental policy is to become a company with an exemplary safety record by fostering a culture that makes safety its highest priority. Accordingly, we are working to ensure that all employees have a sense of responsibility for safety and to implement truly effective safety measures. We are also actively promoting employee health maintenance and improvement activities. Through these efforts, we are creating work environments that are safe and healthy for all employees.

UBE Chemicals (Asia) Co., Ltd.
Location: Rayong, Thailand
Start of operations: 1997
No. of employees: 503
Main products: Caprolactam, ammonium sulfate, nylon 6 resin, nylon compounds

All companies of the UBE Group (Thailand) work together to continuously improve plant operations and produce better service for customers. We also give greatest priority to safety, occupational health and environmental issues, and in February 2016 reached 30 million man-hours without lost time accidents. Seeking to create a more environment-friendly factory, we are working with government agencies toward our aim of receiving Eco Factory certification. Furthermore, we implement social contribution activities. In fiscal 2015, we worked with universities and other bodies to conduct computational chemistry-related research and development, and in March 2016, the UBE Group’s three companies in Thailand established the UBE Group Chemicals Science Research Institute to promote research in cutting-edge chemical sciences.

UBE Corporation Europe, S.A. Unipersonal
Location: Castellon, Spain
Start of operations: 1967
No. of employees: 417
Main products: Caprolactam, ammonium sulfate, nylon 6 resin, copolymerized nylon, polycarbonate diol, 1,5-pentanediol, 1,6-hexanediol

At the end of March 2016, the UBE Group’s three companies in Spain were merged into UBE Corporation Europe (UCE) to optimize management. In nylon manufacturing, we have invested capital to improve stability and safety and to install new underwater pelletizers that produce round polyamide pellets as a part of measures to provide products that meet market needs. In caprolactam, through technological innovation, we have greatly improved steam and energy savings as well as specific consumptions, thus contributing to cost reduction. As a result, in 2015, the production volume of granular ammonium sulfate UBESOL 45 and of nylon reached record highs, even as CO$_2$ emissions decreased 8% ( compared with 2013). To improve safety, we have advanced the Strategic Safety Plan that includes such features as management of change (MoC) and a Safety Instrumented System. Looking at polycarbonate diol (PCD), multiple grades developed by UCE’s R&D team have undergone pilot testing and entered commercial production. Furthermore, working to further reinforce our R&D capacities, we have established a new Fine Chemicals R&D facility.
UBE Nylon, Nylon 12 UBESTA
UBE’s nylon materials are used in various cutting-edge fields, including the mobility area, where the development and adoption of electric vehicles (EVs) and fuel cell vehicles (FCVs) is advancing. For example, these materials are used in a hydrogen tank liner jointly developed with Toyota Motor Corporation.

High-purity silicon nitride powder
Featuring excellent purity and regularity of particle size, our silicon nitride powder is used in applications that include as a material in the bearing balls used in wind turbines, contributing to the expansion of renewable energy.

Polybutadiene rubber (BR)
More elastic and abrasion resistant than natural rubber. Used in a wide variety of specialty products, including UBEPOL VCR, which enables the weight reduction of tires and thus reduces CO₂ emissions.

Material for fragrance and toiletry products
HELIOFRESH, HELIOTROPIN
An alternative to scents made with natural ingredients. These products prevent the deforestation of the Sassafras tree (a member of the Laurel family), helping to preserve woodlands.
The UBE Group works constantly to develop products and technologies that address issues faced by the world today. This section features a number of products and technologies that are contributing to environmental conservation selected from among the more than 500 diverse products offered by the UBE Group.

**Water and sediment quality environmental improvement agents**

**CLEAR WATER, MINERAL CLEAR**
Products that improve water and sediment quality and thus the environments of fish farms, enclosed water areas, etc. (sludge cleanup).

**Exhaust gas processing facility UBE RID**
A high-efficiency facility that mechanically and chemically detoxifies various gases emitted by semiconductor manufacturing processes.

**Gas separation membranes**
- UBE organic solvent (alcohol) dehydration membranes
- UBE carbon dioxide gas separation membranes
Used in applications related to bioethanol dehydration and to separate CO₂ from biogases, contributing to the development of environment-related businesses.

**Exhaust gas processing agents**
- CALBREED SII/EX
- Sorbalit
Used to efficiently absorb harmful gases from waste incinerators and other sources.

**1,6-Hexanediol**
Used as a raw material for dry laminate adhesive for food packaging and also for UV-curing coating used in various items, including mobile phones. Use of 1,6-hexanediol requires no solvents and therefore contributes to VOC reduction.

**Functional electrolyte solution for lithium-ion batteries**
- PURELYTE
- Microporous polyolefin film UPORE
This film is used in the lithium-ion batteries used in hybrid and electric vehicles, personal computers, mobile phones and other technologies.

**YASASHII KABE**
Primarily made from natural diatomite. Capable of humidity conditioning and the absorption and decomposition of the VOCs that cause sick building syndrome, helping to maintain a pleasant living environment.

**POLYWRAP**
An additive-free polyethylene wrap. Made without chlorine, this highly safe product releases no dioxins or chlorine gases when incinerated.

For an overview of UBE’s socially valuable products and technologies, please see www.ube-ind.co.jp/english/eco/eco_friendly.htm
Third-Party Verification and Opinion

Objectives of CSR Report Verification
The Responsible Care Verification Center has verified the UBE Group CSR Report 2016 (hereinafter, "the CSR Report"), created by Ube Industries, Ltd., in order to provide its opinion regarding the following items in its capacity as an expert in the chemical industry:
1) Rationality of the methods used to calculate and tabulate the performance indicators (numerical data) and accuracy of numerical data
2) Accuracy of the information other than numerical data provided in the CSR Report
3) Evaluation of Responsible Care (RC) and CSR activities
4) Characteristics of the CSR Report

Verification Procedures
- The Center staff visited the head office of Ube Industries, Ltd. and asked questions to verify the rationale of the methods 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, presented documentation, and gave explanations.
- The Center staff also visited the Chiba Petrochemical Factory and asked questions to verify the rationale of the methods the factory 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 and those in charge of creating the CSR Report answered the questions of the Center staff, presenting documentation and providing explanations. The Center staff also checked the consistency of the items used with the material evidence submitted.
- The Center used sampling methods to verify the numerical data and other information contained in the CSR Report.

Opinions
1) Rationality of the methods used to calculate and tabulate the performance indicators and accuracy of the numerical data
   - Both the head office and the Chiba Petrochemical Factory calculated and tabulated the performance indicators in a rational manner.

Scope of This Report

<table>
<thead>
<tr>
<th>Period Covered</th>
<th>Fiscal 2015 (From April 1, 2015 to March 31, 2016) (The report, however, does at times refer to activities conducted in fiscal 2016 and future plans.)</th>
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<tr>
<td>Companies covered:</td>
<td>Of which the following companies are covered in the reporting of major financial data (page 11)</td>
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<tr>
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<td>Ube Industries, Ltd. and its consolidated companies (93)</td>
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<td>Consolidated subsidiaries: 68</td>
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<td>Equity-method affiliates: 25</td>
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<td>Of which the following companies are covered in the reporting of environmental performance data</td>
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<td></td>
<td>Ube Industries, Ltd.</td>
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<td>Four chemical factories (Chiba, Sakai, Ube and Ube-Fujimagari)</td>
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<td>Three cement factories and one research center (Ube, Iva and Kanda, and the Technical Development Center)</td>
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<td></td>
<td>The Okinoyama Coal Center Research laboratories in the Ube District (the Organic Chemistry Research Laboratory, Process Technology Research Laboratory, Pharmaceuticals Research Laboratory and Organic Specialty Materials Research Laboratory)</td>
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<td></td>
<td>Other Group companies (9)</td>
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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 others)

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 (fiscal 2011 to 2015)
- The scope of data, however, does vary in places. In such cases, the specific scope is noted on the relevant page.

Reference guidelines

Editorial Policy

We began publishing an annual RC report in 1997 to introduce our environmental initiatives. We subsequently changed the name of the report to the CSR Report. This year, 19 years after the very first publication of the report, we have created the UBE Group CSR Report 2016 as our 12th such report. In our editing of this year’s report, we have maintained a commitment to producing a readable document that is of interest to readers. The main features of the 2016 edition are as follows:

1. Special Feature: The UBE Group Meeting Society’s Needs
   - For the UBE Group to fulfill its role as a useful member of society, and to help solve various social issues through its business, the Group is advancing a number of initiatives. The special features showcased examples of such initiatives, namely 1) UBE’s initiatives aimed at employing people with disabilities, under the motto of shifting from providing care to providing opportunities (the history of such efforts at Libertas Ube, Ltd. and the UBE Group) and 2) The environmental preservation initiatives of UBE’s three cement factories, particularly the exhaust heat power generation facilities of the Kanda Cement Factory.

2. Relationships with Stakeholders and the Scope of Living and Prospering Together
   - Expanding the scope of “living and prospering together,” a philosophy handed down since the Group’s founding, through everyday business activities is the essence of the Group’s CSR activities. We used an illustration to express the idea of expanding the scope of living and prospering together and indicated the means by which we pursue stakeholder engagement.

3. Easy-to-read page format
   - We structured the sections of this report to reflect the seven core subjects of ISO 26000* while also aligning its content with the UBE Group’s existing CSR matrix to satisfy all of our stakeholders.

*The ISO 26000 core subject “the environment” is presented in this report as “Environment and Safety”
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.

Katsuhiko Kokubu
Professor of Social and Environmental Accounting
Graduate School of Business Administration, Kobe University

**Comprehensive, Sophisticated CSR Activities**
I think that the UBE Group’s CSR activities are extremely comprehensive, and the individual activities are sophisticated and fully realized. This year, the report’s sections are aligned with the seven core subjects of ISO 26000, making it easier to read and understand. There is ample information, and it is worth reading as a report. Particularly important is the way that the UBE Group’s activities are shown to be a natural extension of its corporate philosophy of “living and prospering together,” and the firmly established foundation of the Group’s CSR activities depicted in the report is laudable. This year’s report includes detailed information about Libertas Ube, which employs people with disabilities. The report mentions the concrete target of 3% employment of people with disabilities, clearly communicating the active nature of the UBE Group’s initiatives in this area and thus giving a favorable impression.

**Materiality Analysis**
As I mentioned above, the comprehensive nature of the UBE Group’s CSR activities is praiseworthy. However, worldwide CSR guidelines generally recommend analyzing the materiality of such activities to facilitate their management according to level of priority. It is important that a company does not determine materiality on its own; rather, it should solicit opinions from a wide range of stakeholders. The UBE Group is deeply rooted in local communities, so I think that conducting materiality analyses that reflect the views of stakeholders in local communities could perhaps be another step toward the spirit of “living and prospering together.”

**Global CSR Activities**
The report provides some information about the UBE Group’s overseas CSR activities. I suspect, however, that if this information were disclosed in a slightly more structured, systematic way, it might be easier to understand. For example, the labor conditions and state of employee training at overseas factories may be important CSR-related topics. The UBE Group pursues “Value creation,” so the question of how “value” is understood overseas is important. I suggest that, in the future, UBE consider including dialogues with stakeholders at overseas factories and other such content.

**Distributing Value to Stakeholders**
“Value creation” is emphasized as one of the UBE Group’s corporate goals. But how is the value that is created distributed to stakeholders? Recently, ROE has been emphasized in Japan, but I think we are now at a stage where we must consider what management indicators are best from a CSR management perspective. The question of what kinds of value are created and distributed to which stakeholders is the very foundation of CSR. Therefore, managing overall CSR activities and providing feedback to initiatives from this perspective could, I think, enable even richer, more fully realized CSR activities.

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**Response to the Third-Party Comments**
We very much appreciate Dr. Kokubu’s valuable insights with regard to the UBE Group CSR Report 2016.

We are very glad to hear Dr. Kokubu’s favorable assessment of our CSR activities as comprehensive and fully realized. Going forward, we will continue to position “living and prospering together” at the heart of our CSR activities and seek to expand the scope of related activities globally.

Dr. Kokubu provided his opinion related to materiality analysis, the practice of analyzing and determining the importance of CSR issues and activities. Receiving input from a broad range of stakeholders on issues important to tackle in our CSR activities and managing such activities according to priority thus assigned is a task for us going forward.

Also, we will consider providing structured, systematic disclosure about CSR activities at our overseas locations, including looking at such issues as what types of information are sought after.

Dr. Kokubu also commented that the time has come to consider what management indicators are most useful from a CSR management perspective. In his comments on last year’s report, as well, Dr. Kokubu suggested the establishment of key performance indicators. We hope to include such indicators in CSR Report 2017.

Going forward, the UBE Group will work hard to continue to create value and further deepen the confidence of all its shareholders.

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Katsuhiko Kokubu
After graduating with a PhD from Osaka City University and Kobe University, in 2011, Dr. Kokubu assumed a position as professor at Kobe University’s Graduate School of Business Administration, and in 2014 became chair of the program. Dr. Kokubu also serves as the chairman of Material Flow Cost Accounting (MFCA) ISO/TC207/WG8 Committee established by the Japanese Ministry of Economy, Trade and Industry (METI). Dr. Kokubu has served many times as a member and chair of various committees overseen by METI and Japanese Ministry of the Environment. In addition, Dr. Kokubu’s major publications include Material Flow Cost Accounting (Nikkei Publishing Inc.) and Accounting System Supporting Corporate Decision-Making for Environmental Management (ChuoKeizai-Sha, Inc.).

Official website: www.b.kobe-u.ac.jp/~kokubu (Japanese language only)

Atsushi Yamamoto
Executive Officer with Responsibility for Group CSR
The UBE DOG was created in March 1997 as a character for the UBE Group’s TV commercials.

The “Heartfelt Mark” logo affirms that this report was published by a company that proactively promotes the employment of persons with disabilities.