Tokuyama Corporation

Corporate Social Responsibility Division
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Cover Story

The leaves on the cover symbolize people, society and the environment. A combination of orange and green conveys Tokuyama's vibrant, active and dynamic corporate image. Also, the design on the cover depicts the fusion of two colors, with the green and the orange on the page blending with each other. This represents the positive stance of the Tokuyama Group toward pursuing corporate growth and achieving its Centennial Vision.

Date of issue: February 2013
Next issue: Scheduled for October 2013

Chemistry with a heart
TOKUYAMA

In Harmony with People, Society and the Environment

CSR Report 2012

Responsible Care®

Toward Achieving the Centennial Vision

Centennial Vision

February 16, 2018 will mark Tokuyama's centennial founding anniversary. The basic strategies under the Centennial Vision call for a selection and concentration approach to strengthen strategically growing businesses and to bolster international competitiveness. We will concentrate our energies on promoting human resource-based management and CSR activities, as these activities provide the foundations of our basic strategies.

An Ideal Tokuyama Group

"A prominent manufacturer that is responsive to society and helps create a better future through the vitality of its human resources and the creativity of chemistry"

Accelerating Our Growth Strategies

Tokuyama is promoting the three growth strategies under its management slogan,

"Venture Spirit & Innovation,"

toward achieving its Centennial Vision.

Three Growth Strategies

Growing

Strengthen Strategically Growing Businesses (See page 16)

Upholding a basic strategy, "Strengthen Strategically Growing Businesses" under its Centennial Vision, Tokuyama is currently constructing a new Malaysia Factory for the manufacture of polycrystalline silicon for solar cells. This new factory will serve as the second flagship manufacturing base for this product following its Tokuyama Factory. Moreover, Tokuyama aims to expand the capacity of both factories to keep improving its world-class supply capability.

Creating

Create New Businesses (See page 24)

Tokuyama creates environmental technologies and products with the emphasis on social contribution and reducing environmental impact, even from the development stage. Focusing on three growth fields of "information and electronics," "environment and energy" and "life and healthcare," Tokuyama is leveraging the inorganic chemical and crystal technologies that it has accumulated over the years to accelerate product development. As the latest accomplishment of its R&D activities, Tokuyama is proceeding with the commercialization of sapphire single crystal wafers for LED chip manufacturing.

Integrating

Bolster International Competitiveness (See page 30)

The sources of competitiveness of our Tokuyama Factory are the unparalleled energy efficiency and superior technologies that we have nurtured at the frontlines of manufacturing operations. By refining its integrated manufacturing operations, Tokuyama is working to establish a highly profitable business structure. At the same time, by developing the Tokuyama Factory into its "Mother Factory," the Company will continue to reinforce its international competitiveness. Furthermore, we aim to make the Tokuyama Factory a manufacturing base that coexists and grows with local communities while establishing close communication with our stakeholders.

Editorial Policy

- The *CSR Report 2012* has been compiled with the aim of bringing Tokuyama's activities—directed at meeting its corporate social responsibility in fiscal 2011—to the attention of all concerned, including shareholders, investors, trading partners, employees and their families, people living near its production sites and other people in general.
- As with the 2011 edition, Tokuyama asked Ms. Eriko Nashioka of the Institute for Environmental Management Accounting to offer independent comments on this report. The purpose of the independent comments is to continuously seek feedback and ratings that help the Company to fulfill its social responsibility. Details of Ms. Nashioka's comments are available on page 54.
- This CSR report has been prepared based on the Environmental Reporting Guidelines (Fiscal 2007 edition) published by the Ministry of the Environment.
- This CSR report is also available via Tokuyama's website at:
  www.tokuyama.co.jp/eng/csr/report/

Scope of the Report

Period: All performance data is for fiscal 2011, from April 1, 2011 to March 31, 2012. Certain activities undertaken after April 1, 2012 are included.

Companies: Tokuyama Corporation (Environmental performance data is for the Tokuyama Factory and the Kashima Factory.); certain environmental performance data includes total values for 11 major production companies within the Tokuyama Group (see page 50).

Region: Activities in Japan (including some overseas Group companies)

Date of issue: February 28, 2013 (The next edition will be issued in October 2013)

Contents

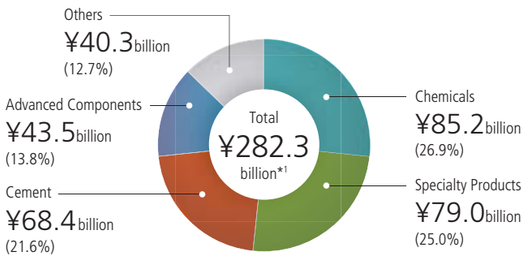
The Tokuyama Group at a Glance

(as of March 31, 2012)

Company Outline

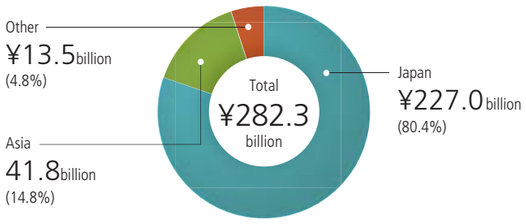
Company name:	Tokuyama Corporation
Established:	February 16, 1918
Capital:	¥53,458 million
Registered address:	1-1, Mikage-cho, Shunan-shi, Yamaguchi, Japan
Head office:	Kasumigaseki Common Gate West Tower, 3-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, Japan
Branches and offices:	Sendai, Nagoya, Osaka, Takamatsu, Hiroshima and Fukuoka
Production and research sites:	Tokuyama Factory, Kashima Factory and Tsukuba Research Laboratory
Number of consolidated subsidiaries:	48
Number of equity-method companies:	8

Sales Breakdown by Segment (Fiscal 2011)

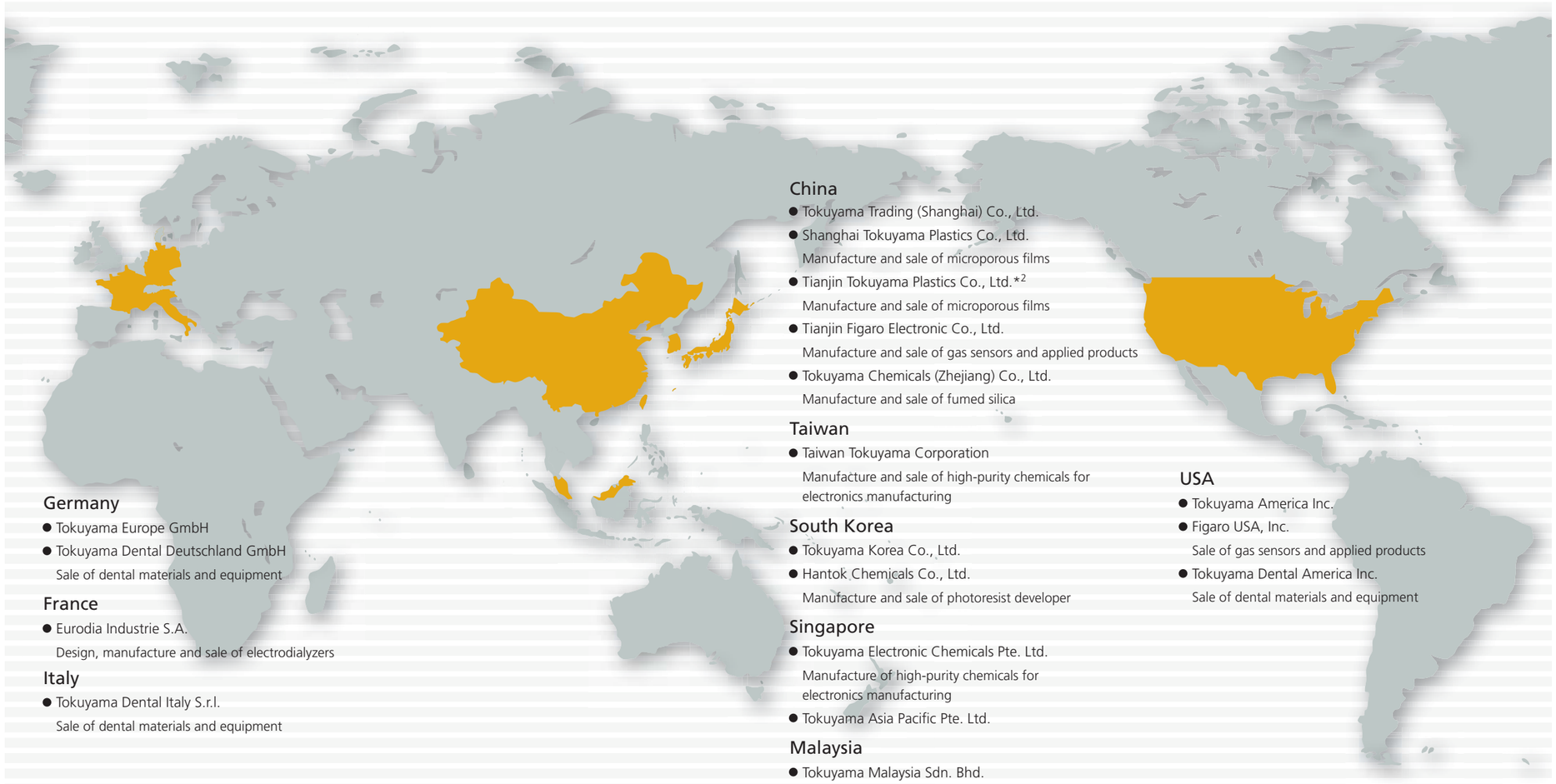


*1 Segment's figures include inter-segment sales.

Sales by Region (Fiscal 2011)



Tokuyama's Global Network



China
- Tokuyama Trading (Shanghai) Co., Ltd.
- Shanghai Tokuyama Plastics Co., Ltd.
  Manufacture and sale of microporous films
- Tianjin Tokuyama Plastics Co., Ltd.*2
  Manufacture and sale of microporous films
- Tianjin Figaro Electronic Co., Ltd.
  Manufacture and sale of gas sensors and applied products
- Tokuyama Chemicals (Zhejiang) Co., Ltd.
  Manufacture and sale of fumed silica

Taiwan
- Taiwan Tokuyama Corporation
  Manufacture and sale of high-purity chemicals for electronics manufacturing

South Korea
- Tokuyama Korea Co., Ltd.
- Hantok Chemicals Co., Ltd.
  Manufacture and sale of photoresist developer

Singapore
- Tokuyama Electronic Chemicals Pte. Ltd.
  Manufacture of high-purity chemicals for electronics manufacturing
- Tokuyama Asia Pacific Pte. Ltd.

Malaysia
- Tokuyama Malaysia Sdn. Bhd.
  Manufacture and sale of polycrystalline silicon

USA
- Tokuyama America Inc.
- Figaro USA, Inc.
  Sale of gas sensors and applied products
- Tokuyama Dental America Inc.
  Sale of dental materials and equipment

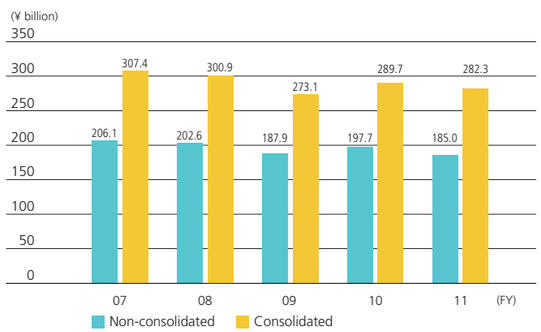
Germany
- Tokuyama Europe GmbH
- Tokuyama Dental Deutschland GmbH
  Sale of dental materials and equipment

France
- Eurodia Industrie S.A.
  Design, manufacture and sale of electrodialyzers

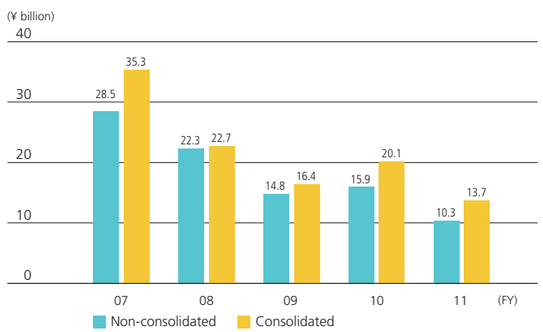
Italy
- Tokuyama Dental Italy S.r.l.
  Sale of dental materials and equipment

*2 Production is scheduled to begin in December 2012 (See p6).

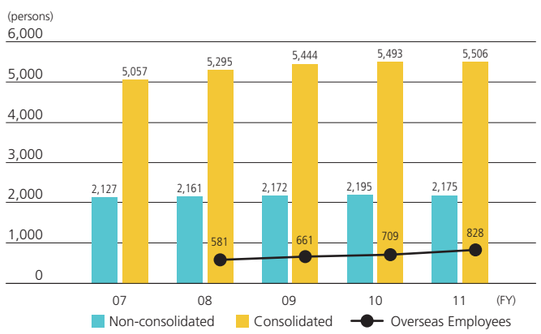
Net Sales



Operating Income



Number of Employees



Top Message

Under our new Three-Year Management Plan, we will pursue reforms as we get ready to meet global competition.

Stepping up Growth Strategies to Realize Our Centennial Vision

As 2018 approaches, the year in which Tokuyama Corporation will mark the centennial anniversary of its founding, the Tokuyama Group is evolving into something new. The underlying principle of Tokuyama's Centennial Vision is "Venture Spirit & Innovation." This principle has grown out of our belief that no corporation can survive in the global market unless it continues to change.

Fiscal 2012, ending March 31, 2013, is the first year of the Three-Year Management Plan we have newly launched. Under this plan, we are striving to reform our product range to meet not only domestic demand but also foreign demand. Moreover, within the Group we are raising awareness of global competition and accelerating efforts to ensure an optimal structure and systems that are capable of excelling on the global stage.

During fiscal 2011, Tokuyama struggled amid a series of adversities that threatened the success of its growth strategy, namely, the Great East Japan Earthquake, the flooding in Thailand and the European debt crisis. Despite the circumstances, we kicked off the expansion of polycrystalline silicon production facilities at the Tokuyama Factory and in Malaysia. We also established Tianjin Tokuyama Plastics Co., Ltd. in China. Moreover, we initiated a verification test for sapphire single crystal wafers with the aim of launching a new business. These actions have persistently moved Tokuyama toward the realization of its Centennial Vision. We will strive to steadily implement the Malaysia Project, which focuses on polycrystalline silicon operations as a core strategically growing business, while continuing to work toward launching new businesses as early as possible and improving the competitiveness of our basic material businesses.

The Foundation of the Centennial Vision's Basic Strategies—Human Resources and CSR

As for human resource-based management, we believe that it is essential for us to offer our employees a vibrant and lively working environment that inspires devotion to duty. Aiming to enhance on-site capabilities, we will further elevate the skills of our staff on the manufacturing frontlines. Of course, we also recognize that nurturing globally capable human resources is an urgent issue. We believe Tokuyama's corporate culture will be positively affected by the return to Japan of those who are now participating in the Malaysia Project, where they have gone to gain broader experience in global business. At the same time, we expect that they will disseminate the philosophy and traditions of Tokuyama in Malaysia and elsewhere overseas.

Without young and vigorous employees and a vibrant workplace, Tokuyama cannot expect to achieve sustainable growth into the future. Because of that, we encourage employees to make suggestions proactively and to take action to realize their ideas.

As for the promotion of Corporate Social Responsibility (CSR) activities, we recognize employees as important stakeholders. In line with this recognition, we are facilitating the setting of career goals to ensure that each employee is motivated in their work, while promoting their mental and physical health, and improving work-life balance. By doing so, we are seeking to create a vibrant workplace that enables them to practice "Venture Spirit & Innovation."

Creating a Highly Transparent Management Structure to Earn the Trust of Stakeholders Worldwide

When pursuing globalization, we believe that it is indispensible to earn the trust of stakeholders worldwide, including shareholders, investors and customers. In polycrystalline silicon operations, specifically, we must build strong relationships of trust with the people and the government of Malaysia, where our operations are growing. Tokuyama undertook management structure reforms in 2011 to enhance the transparency of management. We appointed an outside director to reinforce the supervisory function of the Company's Board of Directors and introduced an executive officer system to clearly separate the supervisory and business execution functions.

Looking ahead, we will continue to pursue initiatives to strengthen corporate governance.

The Tokuyama Factory Is Always on the Side of Local Communities of Shunan City

We believe that the highest-priority issue for us is to remain a company that deserves the trust of local communities. With strong awareness that our Tokuyama Factory is one of the largest plants in Shunan, Yamaguchi Prefecture, we put this awareness into concrete action, paying the utmost attention to safety.

In Shunan, the city where Tokuyama was founded, we have been pursuing a number of initiatives with the aim of creating a factory that interacts proactively with local communities. As part of the Responsible Care (RC) activities we have been carrying out for over 16 years, we promote information disclosure by proactively inviting people from local communities to meetings and on factory tours.

We are also promoting a recycling approach that is responsive to the needs of society. For example, waste and by-products generated inside the Company or accepted from outside are recycled into raw materials and fuel for cement production, helping to maintain the zero-emission rate at high levels.

Guided by the "safety first" basic policy that underlies our operations, we are thoroughly improving manufacturing processes and promoting energy conservation as we work to provide products with high quality and high efficiency.

Through such initiatives, we strive to gain the confidence of society while continuing to grow in scale and enhance quality.

Communication with Stakeholders Is Key to CSR Activities

Strengthening our initiatives to take on global challenges, including the protection of human rights and environment preservation, the Tokuyama Group decided to publically announce the "Tokuyama Group Guidelines for Business Activities," which were drawn up in line with its basic philosophy on CSR management.

On the other hand, we have implemented various measures to prevent the recurrence of the mislabeling of fireproof specifications on plastic window sashes, since we announced measures designed to prevent such mislabeling in March 2009. To regain the trust of our customers and other stakeholders in the Tokuyama Group, we have rallied all the strength of the Group, stepping up efforts to complete repairs of such sashes.

Taking the matter seriously and looking ahead, we will continue to ask ourselves the same question, "What is our social responsibility?" Working diligently and constantly to find the right answers to this question, we will consistently promote CSR-oriented global corporate management.

We invite readers to provide us with feedback and welcome a frank exchange of views with them in connection with this report.

July 2012

Kazuhisa Kogo

President

Growing

Strengthen Strategically Growing Businesses

November 2011

Groundbreaking Ceremony at Tianjin Tokuyama Plastics Co., Ltd.

To kick off the construction of a factory for the manufacture of microporous film for use in disposable diapers, Tianjin Tokuyama Plastics Co., Ltd.—a subsidiary in China—held a groundbreaking ceremony. Upon completion, the new factory will serve as our second Chinese production base following Shanghai Tokuyama Plastics Co., Ltd., which was established in 2002. Production at Tianjin Tokuyama Plastics is scheduled to begin in December 2012 and will yield 10 million square meters per month. In tandem with Shanghai Tokuyama Plastics, which produces 20 million square meters per month, Tianjin Tokuyama Plastics aims to expand its business in the Chinese disposable diaper market, which is expected to keep growing by 20% or more every year.

Tianjin Tokuyama Plastics Co., Ltd.

November 2011

Expansion of Polycrystalline Silicon Production Facilities

To meet increasing demand for polycrystalline silicon, we are expanding our production facilities at the Tokuyama Factory and Tokuyama Malaysia Sdn. Bhd. At the Tokuyama Factory, a new plant has been under construction since November 2011 and is scheduled to begin operations in spring 2013. Upon completion, the total annual capacity of the Tokuyama Factory will increase from 9,200 tonnes to 11,000 tonnes. Meanwhile, Tokuyama Malaysia has been carrying out second-phase plant construction since February 2012. This second plant is scheduled to begin operations in spring 2014. Once completed, combined annual production capacity of the first and second plants will amount to 20,000 tonnes.

August and November 2011

Integration of Tokyo Head Office and Relocation of Osaka Branch

In August 2011, we integrated our Tokyo Head Office—which was previously divided between two locations, one in Shibuya and the other in Shimbashi—and reopened it in Kasumigaseki, Chiyoda-ku. In addition, we relocated the Osaka branch in November 2011 from Kitahama, Chuo-ku, to Nakanoshima, Kita-ku. Both new offices were designed with due consideration given to the environment and with a greater emphasis on workplace safety while providing an atmosphere conducive to communication, spurring even greater devotion to their work among staff members.

New Offices

Tokyo Head Office: Kasumigaseki Common Gate West Tower, 2-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo, Japan
Osaka Branch: Nakanoshima Central Tower, 2-7, Nakanoshima 2-chome, Kita-ku, Osaka City, Osaka, Japan

The Kasumigaseki Common Gate West Tower, which houses Tokuyama's Tokyo Head Office

Creating

Create New Businesses

April 2011

Initiated Sales of an Inkjet Printing Plaster Sheet "Fresco Giclee"

We initiated sales of Fresco Giclee, a new-generation inkjet printing sheet developed based on our proprietary plaster (*shikkui*) thinning technology. Although we are currently aiming to meet demand from professional photographers with this product, we will eventually expand sales to amateur photo enthusiasts. We are proactively promoting "Fresco Giclee" by exhibiting it at various trade shows.

CP+ Camera & Photo Imaging Show 2012

October 2011

Verification Testing Facility for Sapphire Single Crystal Wafers Started Operations in Akita

We completed the construction of a new verification testing facility in Misato-cho, Senboku-gun, Akita Prefecture. The facility produces wafers for LEDs from ingots of sapphire single crystals made at the Tokuyama Factory. Trial operations were initiated in November 2011 and sample products have been already produced and shipped from the facility (see page 24).

Verification testing facility at the Corporate Development Department (Akita)

January 2012

Exhibited at the "LED/OLED Lighting Technology Expo"

Tokuyama exhibited a number of products at the fourth "LED/OLED Lighting Technology Expo" held at the Tokyo Big Sight. The Advanced Materials Sales Department presented aluminum nitride (AlN) fillers that can be used for various parts of LEDs, while the Corporate Development Department exhibited sapphire single crystal wafers for LEDs. Both products attracted attention from industry representatives.

Integrating

Bolster International Competitiveness

September 2011

Adopting Palm Kernel Shell as a Biomass Fuel for the In-House Power Plant

Aiming to reduce CO_2 emissions and fuel costs, we decided to adopt Palm Kernel Shell (PKS) to fuel the in-house power plant at the Tokuyama Factory. We imported approximately 10,000 tonnes of PKS, evaluated the impact of handling PKS at the factory unloading dock and tested its combustibility when blended with coal over an extended time period. Testing proved the usefulness of the PKS material as a biomass fuel. Looking ahead, we will proactively adopt PKS to promote the reduction of CO_2 emissions.

A chute for PKS

PKS: Palm Kernel Shell

October 2011

Autumn General Disaster Drill at the Tokuyama Factory

Based on the scenario of a major disaster caused by an earthquake, a disaster drill was held at the Tokuyama Factory. In this case, a fire in the microporous film raw material storage facility was followed by a leakage of printing ink and a spill of polyethylene pellets accompanying anticipated aftershocks. Aiming to strengthen our safety and disaster prevention capability, we practiced and simulated disaster response procedures which began with an emergency call and covered all the broad phases, including initial fire extinguishing efforts, quenching the fire using fire engines, treating injured persons and holding a press conference.

Emergency command post (above)
In-house fire-fighting team practices fire extinguishing (below)

December 2011

Highest Ranked in Environmental Ratings by the Development Bank of Japan

Tokuyama has been assigned the highest-level ranking in the environmental ratings of the Development Bank of Japan (DBJ). The aim of the rating system is to evaluate business operators in terms of their initiatives for environmental management and thereby identify excellent companies. Depending on the evaluations, favorable loan conditions are set for qualifying companies. The DBJ ranking was granted in light of Tokuyama's advanced environmental activities.

Tokuyama's CSR

Management That Is Responsive to Society

Tokuyama's CSR

Tokuyama approaches its CSR activities in accordance with its basic policy of engaging in management that is responsive to society. We believe that CSR activities help us to sustainably grow our business and enable us to work with society to build a sustainable future. To increase stakeholder satisfaction, we are committed to promoting activities that are evaluated highly by stakeholders and all members of society. (See chart on the right.)

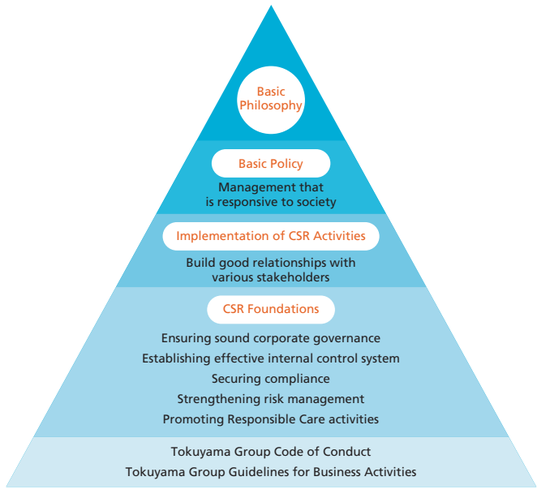
Tokuyama has positioned the assurance of sound corporate governance and establishing effective internal control systems as a significant part of its CSR foundations, and the promotion of compliance and risk management underpins our internal control. Along with Responsible Care (RC) activities—an important area in the management of the Tokuyama Group—we are working to achieve optimally balanced CSR foundations.

During fiscal 2011, Tokuyama focused on reinforcing compliance education, raising employee awareness on compliance and strengthening its risk management structure, with a newly established CSR Promotion Council spearheading these efforts.

Adhering to the Tokuyama Group Code of Conduct and the Tokuyama Group Guidelines for Business Activities (see pages 52 and 53), we will continue to establish good relationships with our stakeholders and practice management that is responsive to society, thereby maintaining the Tokuyama Group's status as a corporate group of choice for our customers.

To ensure that compliance is promoted Groupwide in a tangible manner, we have distributed a handbook containing the Tokuyama Group Code of Conduct, the Responsibility of Senior Management under the Tokuyama Group Code of Conduct and the Tokuyama Group's Five Conscience Clauses to every executive and employee of the Group (see page 53).

Tokuyama's CSR



Accelerating Our CSR Initiatives

Tatsuo Segawa
Director, Senior Managing Executive Officer

I recognize that the fulfillment of our Corporate Social Responsibility must involve the cultivation of harmonious relationships with our stakeholders. More specifically, we must always be aware of the social and environmental impact that each phase of our business operations exerts while maintaining complete accountability for our impact. Based on this premise, the Tokuyama Group is seeking to contribute to the creation and development of a sustainable future through its CSR activities.

Aiming to remain a "prominent manufacturer that is responsive to society," for many years the Tokuyama Group has been pursuing Responsible Care (RC) activities initially begun in the form of voluntary chemical substances management. Through our RC activities, we have also been promoting environmental management and achieved significant reductions in unit energy consumption as well as the commercialization of resource recycling utilizing our cement plant.

Recently, the Group has been accelerating the augmentation of its CSR foundations, aiming to enhance transparency and ethical standards. Moreover, we have been seeking to strengthen corporate governance through management structure reforms and to improve our internal control system, with a focus on compliance and risk management. Of course, we recognize that global CSR has become an essential issue as we expand our overseas operations.

As 2018 approaches, the year in which Tokuyama Corporation will mark the centennial anniversary of its founding, the Tokuyama Group is evolving into something new. The underlying principle of Tokuyama's Centennial Vision is "Venture Spirit & Innovation." This principle has grown out of our belief that no corporation can survive unless it continues to change. Looking ahead, we are accelerating our CSR activities to better respond to society's evolving expectations.

Basic Philosophy of Tokuyama's CSR-Oriented Management

Tokuyama approaches its CSR activities in accordance with a basic philosophy of continuously working with society to build a sustainable future and promoting corporate activities that are evaluated highly by its various stakeholders, namely, shareholders, customers, employees, trading partners, communities and society as a whole.

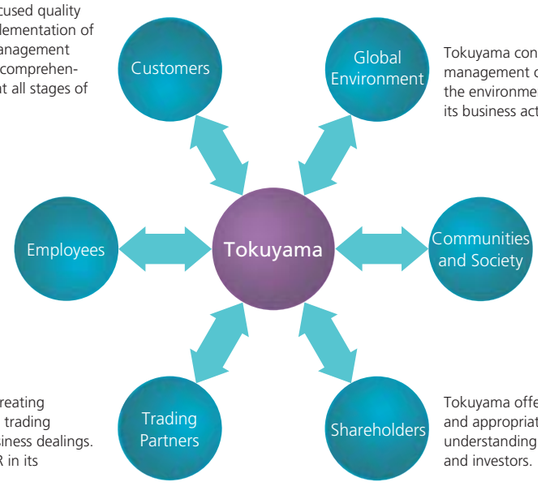
Tokuyama's Major Stakeholders

Tokuyama conducts customer-focused quality assurance activities based on implementation of its ISO 9001-compliant quality management system. Chemical substances are comprehensively managed to ensure safety at all stages of the manufacturing process.

Tokuyama conducts environmentally friendly management operations with an emphasis on the environmental perspective in every aspect of its business activities.

Tokuyama strives to improve the working environment and the mental and physical health of its employees so that every employee can exhibit his or her abilities and perform duties actively and with a high level of motivation.

Tokuyama is engaged in many different activities directed at contributing to society. They include financial support for scientific development and technology, activities to foster new generations and local volunteer activities. We are also working on communication with local communities by providing opportunities for RC community dialogues.



Tokuyama is committed to creating relationships of trust with all trading partners through honest business dealings. Tokuyama also practices CSR in its purchasing activities.

Tokuyama offers information in a prompt and appropriate manner to gain the understanding and trust of shareholders and investors.

Tokuyama's CSR Foundations: Corporate Governance and Internal Control

Basic Approach to Corporate Governance

Tokuyama believes that corporate governance is an important foundation for maximizing its corporate value. Tokuyama also believes that it must conduct daily inspections and take necessary steps to ensure its corporate governance systems always function appropriately.

At the same time, Tokuyama is working consistently to strengthen its compliance with corporate ethics, laws and regulations as a means of enhancing its corporate value. Furthermore, we believe that we can gain the trust of stakeholders—including shareholders, customers, employees, trading partners and local communities—by accurately understanding our social responsibility and pursuing management that is responsive to society.

Corporate Governance Structure

Board of Directors and Executive Officer System

Tokuyama's Board of Directors meets at least once a month to deliberate and make resolutions on important matters regarding business operations while supervising business operations. As of June 26, 2012, the Board of Directors consisted of eight directors. To reinforce the supervisory function of the Board of Directors, the Company has appointed one outside director.

Tokuyama introduced an executive officer system in April 2011 with the aim of separating the supervisory and executive functions for business operations. As of June 26, 2012, the Company had 23 executive officers. With the Board of Directors delegating authority for business operations to executive officers and supervising these operations, the Company has established a management structure that stresses clear accountability and efficient decision making and is capable of responding to changes in operating conditions flexibly. In addition, the term of office of directors is set to one year to ensure clear accountability and management capability to promptly adjust to changes in the Company's operating environment.

Board of Auditors

The Company's Board of Auditors consists of four auditors, two of whom are externally appointed. The Board of Auditors holds meetings to report, discuss and make resolutions on important matters. Also, auditors frequently attend Board of Directors meetings and various other key meetings to oversee the execution of duties by directors through discussions and other activities.

Human Resources Committee

The Human Resources Committee consists of the representative directors and an outside director. This committee holds discussions on such matters as the remuneration for directors and executive officers and the selection of director and executive officer candidates before Board of Directors meetings take place.

Executive Committee

Tokuyama has established the Executive Committee as an advisory body to the president. This committee consists of the president and the executive officers selected by the president. The committee meets twice a month to make decisions regarding business operations in a flexible manner.

Strategy Committee

The Strategy Committee is an advisory body to the president and consists of the president and the executive officers selected by the president. This committee meets once a month to discuss the implementation and plans for such important matters as the launch, withdrawal and discontinuation of businesses and the implementation of large-scale infrastructure investments. Through these discussions, the committee helps the president determine the Company's policies for business operations relating to those important matters.

CSR Promotion Council

Our CSR Promotion Council sets policies on CSR and lays out the goals of our CSR activities, facilitating the execution and attainment of all such activities and goals. The Council focuses on the strengthening of corporate governance and improvement of internal control systems, which together are the foundations of CSR. It also makes other important determinations on matters regarding internal control. The Council is chaired by the president and attended by the members of the Board of Directors and the Executive Committee.

Risk Management and Compliance Committee

Tokuyama's Risk Management and Compliance Committee—chaired by the director supervising the Corporate Social Responsibility Division—operates under the CSR Promotion Council. The Committee takes the initiative in promoting risk management and compliance, which are positioned as central to the development of effective internal control systems.

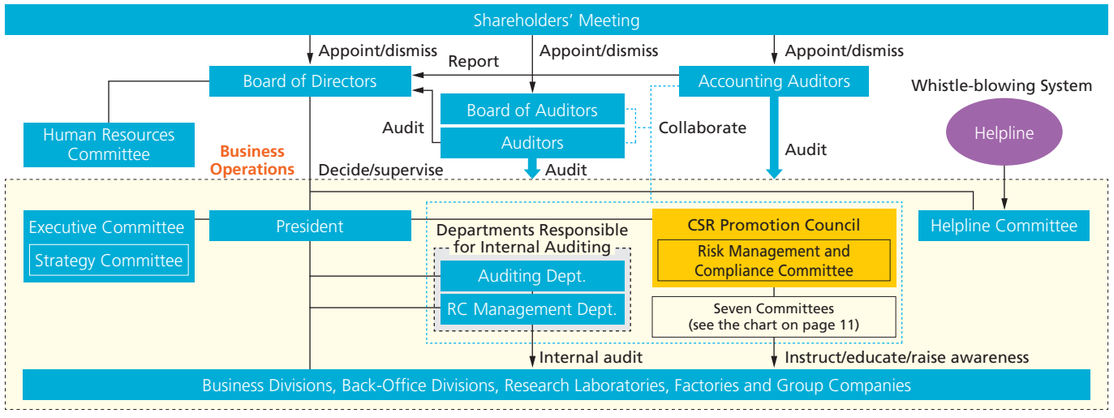
Helpline Committee

The Helpline Committee is responsible for the administration of Tokuyama's whistle-blowing system, which has been established for the purpose of enabling the internal reporting of legally questionable actions and behaviors by Group executives and employees.

Departments Responsible for Internal Auditing

Tokuyama has established the Auditing Department and the RC Management Department, which are responsible for internal auditing. These departments perform internal audits of individual divisions and departments of the Company as well as of Group companies.

Corporate Governance Structure

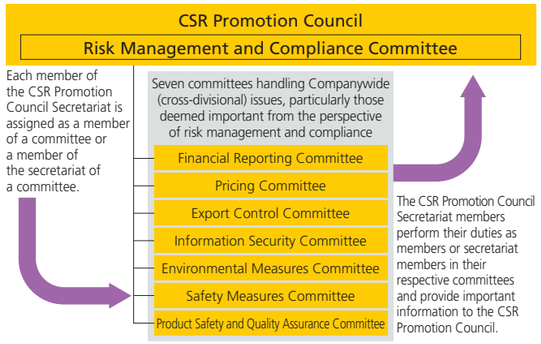


Internal Control, Risk Management and Compliance Promotion Systems

Promotion Systems Supported by Companywide Committees

Tokuyama has established the Risk Management and Compliance Committee under the CSR Promotion Council. Also, under the CSR Promotion Council, we have established the Financial Reporting Committee, Pricing Committee, Export Control Committee, Information Security Committee, Environmental Measures Committee, Safety Measures Committee, and Product Safety and Quality Assurance Committee. These seven committees handle Companywide (cross-divisional) issues, particularly those deemed important from the perspective of risk management and compliance, in the areas coinciding with each committee's mandate.

CSR Promotion Structure



Financial Reporting Committee

This committee has been formed to ensure the reliability of Tokuyama's financial reporting. The committee manages the processes of preparing financial reports following end-of-period closing procedures. It consists of members selected from the Management Support Center, which is responsible for end-of-period closing procedures, and other related departments.

Pricing Committee

This committee has been established with the aim of ensuring the fair pricing of Tokuyama's products and services. The committee deliberates on and approves the revision to selling prices of the Company's products and services.

Export Control Committee

This committee has been established to ensure that Tokuyama appropriately manages its export products to help maintain international peace and security. Also, the committee works to prevent the Company from violating laws and regulations relating to export and other types of transactions.

Information Security Committee

This committee has been launched with the mission of maintaining the security of the Tokuyama Group's information assets and promoting the active use of these assets. The committee makes decisions about the Company's basic policies on overall matters relating to information security while engaging in activities to increase the awareness of information security among Group executives and employees. It also undertakes activities to promote the protection of private information.

Environmental Measures Committee

This committee deliberates and makes decisions on Tokuyama's environmental policies as well as on plans and measures for the Company's environmental management activities.

Safety Measures Committee

This committee deliberates and makes decisions on our safety policies. Also, the committee discusses and approves the plans and results of our safety management activities.

Product Safety and Quality Assurance Committee

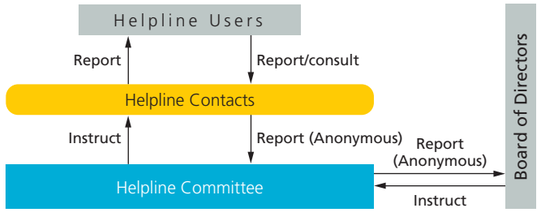
This committee deliberates and makes decisions on our policies regarding product safety and quality. In addition, the committee discusses and approves the plans and results of our product safety and quality management activities.

Promotion of Risk Management

The Group has been continuously improving its risk management systems, including rules and guidelines for managing risks that may result in loss or damage. To further promote risk management, the Risk Management Promotion Subcommittee is positioned under the Risk Management and Compliance Committee. At this Subcommittee, we identify significant Groupwide risk factors specific to the Tokuyama Group through discussions with related divisions and departments. After evaluating the gravity of each factor and considering possible countermeasures, we set targets for risk management and assess the Group's current status to clarify the issues which need to be addressed. Of these, we select the most pressing issues to address with priority. In fiscal 2012, the Group plans to further examine priority issues and determine possible countermeasures.

Whistle-blowing System (Helpline System)

Tokuyama has launched a helpline system. Through this system, employees and other persons are allowed to anonymously report or seek consultations regarding compliance violations, including possible violations, within the Tokuyama Group. The system has been designed to prevent any disadvantageous treatment of persons who have made reports or sought consultations.



Establishment of Foreign Trade Control Department

To Enhance Ethical Standards on Export

Youji Miyamoto
General Manager, Foreign Trade Control Department

Tokuyama has obtained a "Bulk License" from the Minister of Economy, Trade and Industry. Under this license, Tokuyama is able to export certain types of products and technologies that are subject to the export restrictions set forth in the Foreign Exchange and Foreign Trade Control Act without obtaining specific, item-by-item government approval.

The law requires the implementation and enhancement of compliance programs to maintain the license. Therefore, the Foreign Trade Control Department was established in October 2011 to accelerate the implementation of the compliance program, which it is doing by providing instructional education for the personnel of divisions and departments handling exports as well as by auditing and improving the export management system to meet the needs of outside customers as well as in-house users.

RC Promotion Structure and Operation of Management Systems

Responsible Care

Responsible Care (RC) refers to the voluntary management activities of companies that manufacture and handle chemical substances to protect the environment and maintain the safety and health of members of the public and employees in all processes covering the development, manufacturing, distribution, use, final consumption and disposal of chemical substances. Also, RC activities involve the publication of the results of the activities and the promotion of dialogues and communication with society. The RC concept originated in Canada in 1985, and it is now in place in 52 countries around the world. In Japan, the Japan Responsible Care Council (JRCC) was established in 1995 within the Japan Chemical Industry Association (JCIA). It had 97 corporate members as of May 2012, Tokuyama being one of the founding members. We actively promote RC activities as the basis of our environmental management and CSR activities.

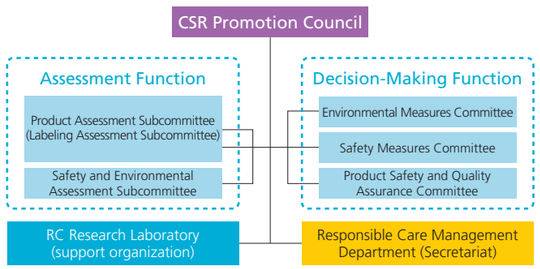
CSR Activities Centered on RC Activities

Tokuyama's CSR activities center on RC activities. A Companywide promotion structure has been established to soundly operate various management systems. In this way, we continue to improve our environmental, safety, and quality management systems.

RC Promotion Structure

Chaired by the president and consisting of members of the Board of Directors and members of the Executive Committee, the CSR Promotion Council is Tokuyama's top decision-making body for RC activities. Under the CSR Promotion Council, the Company has established the Environmental Measures Committee, Safety Measures Committee and Product Safety and Quality Assurance Committee as decision-making bodies. Also, the Company has established several subcommittees—such as the Product Assessment Subcommittee—which provide various assessment functions. All these committees and subcommittees promote specific initiatives in their respective areas of responsibility.

RC Promotion Structure



This laboratory checks the safety of chemicals and assesses their environmental impact using simulations. It also carries out environmental measurements, working environment measurements and ultra-trace analysis of substances under regulation and chemical pollutants.

This department promotes RC activities throughout the Group, covering the areas of the environment, safety and quality.

Basic Philosophy of Responsible Care

Basic Policy

As a member of the Japan Responsible Care Council, Tokuyama Corporation carries out Responsible Care activities that protect the environment and preserve safety and health throughout the entire chemical substance life cycle, from development and manufacturing to distribution, use, final consumption and disposal.

Our social mission is to aggressively tackle and systematically solve environmental issues in particular, which, in turn, will lead to sustainable corporate and social development. Based on this recognition, we promote Environmental Management, a management policy that emphasizes the environment, in all of our business activities, including development, manufacturing and sales.

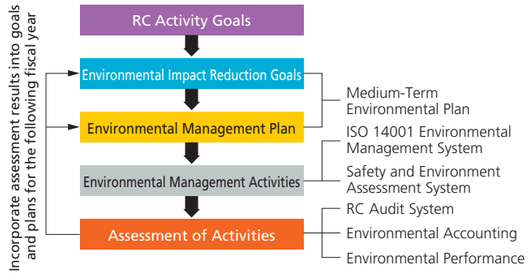
Action Objectives

1. **Promote environmental protection**
   - Implement an ISO 14001-based Environmental Management System and reduce environmental impact
2. **Observe the laws and regulations**
   - Observe international rules, domestic laws and regulations and industrial standards
   - Thoroughly implement export management rules on materials under control
3. **Promote energy conservation and curb global warming**
   - Achieve top-class unit energy consumption in the industry for each product
4. **Promote resource recycling and work toward reduction and the proper management of waste materials**
   - Promote the material recycling and thermal recycling of resources
   - Work toward achieving a paperless office
5. **Promote process safety, disaster prevention and occupational health and safety**
   - Aim for zero accidents and disasters based on the principles of self-responsibility and the self-management of safety
   - Achieve a comfortable working environment and protect people's safety and health
6. **Ensure strict product safety standards**
   - Offer environmentally friendly products that can be used with safety
   - Provide proper information on how to use products and what precautions to take
7. **Deepen the relationship of trust with society**
   - Publicly disclose information on the Company's activities concerning environmental protection, process safety and disaster prevention, occupational health and safety, and chemical product safety
   - Actively engage in dialogue with the local communities

RC Activity Evaluation and Management System

Tokuyama adopts a medium-term plan in the area of Responsible Care and determines its policies and targets for each fiscal year to achieve the plan. Under these policies, the individual departments create specific plans and engage in their activities. The results of these activities are assessed at the end of each fiscal year so that the plans for the following fiscal year will reflect the findings. Tokuyama formulated a new four-year plan starting in fiscal 2011. Activities under the plan are now in progress.

RC Activity Evaluation and Management System (Environmental Preservation)



Operation of Management Systems

ISO 14001 Environmental Management System

The Tokuyama Factory and the Kashima Factory have already acquired ISO 14001 certification. ISO 14001 is an international standard for environmental management systems. In line with the Companywide environmental policy, each factory sets out an environmental policy and the specific goals to be achieved in areas covering environmental impact reduction, energy conservation, waste reduction and resource recycling.

At the Company's head office, branch offices and research laboratories, activities are underway based on their respective policies and goals set out according to the scale of their operations, covering energy conservation, waste reduction, resource recycling and other activities.

ISO 9001 Quality Management System

Tokuyama has also acquired ISO 9001 certification for its quality management system. Since fiscal 2002, this system has been operated as a system covering sales, development and all other divisions of the Company.

Occupational Health and Safety Management System

In accordance with the Japan Chemical Industry Association (JCIA) New Occupational Health and Safety Guidelines, Tokuyama has built and promoted occupational health and safety management systems at individual factories and offices. In fiscal 2005, the Tokuyama Factory upgraded its system into a comprehensive safety management system covering various safety-related activities.

Assessment Systems

Tokuyama has set up several assessment systems in an effort to reduce environmental and safety risks.

Safety and Environmental Assessment

Prior to installing, expanding or modifying any facility, we conduct safety and environmental assessment. We check the safety design of equipment, the safety level of the materials handled, compliance with the laws and regulations and the impact on the environment, thereby ensuring that our facilities are safe, easy to operate, easy to maintain, and accident- and disaster-resistant. The assessments apply to three stages: Basic Plan Assessment, Design Assessment and Pre-Operational Assessment. At these stages, assessments are conducted to verify that the facilities have a safety- and environment-oriented design, that they have been built to the design requirements and that they are ready for operation.

Product Assessment and Labeling Assessment

To ensure product safety, Tokuyama conducts a product safety assessment at each stage, from research and development to commercialization. We assess the risk evaluation and examine compliance with the statutory requirements from a wide range of perspectives, including the safety of the chemical substances involved, the environmental impact and the effect on human health. We also assess the labeling to ensure that the product information in catalogs, manuals on safe handling, material safety data sheets (MSDSs)* and other types of labeling contain no deficiencies in relation to the instructions and/or warnings and that there are no inappropriate statements.

* A material safety data sheet is a document that deals with the hazard and toxicity of a chemical substance. It is prepared to ensure the safe handling of a particular substance and provides information on the name of the substance, safety measures, the action to be taken in the event of an emergency, and so forth.

Education and Training

Employee education on Responsible Care activities is provided for all members within the framework of level-specific group education.

Practical education and training in relation to environmental management, safety management, occupational health and safety, and quality management are offered as part of actual management activities. To take environmental management for example, the Tokuyama Factory and the Kashima Factory have formulated specific education and training plans in accordance with the ISO 14001 environmental manual. They offer education on the importance of environmental conservation and compliance with relevant laws and regulations to employees and contracted workers alike.

In safety management and occupational health and safety, we offer hazard prediction training, hands-on experience training, pre-work hazard prediction activities, safety regulation education, internal special education on electricity, oxygen deficiency, waste incinerators and other areas, foreman education, troubleshooting training, training on the use of fire prevention and extinguishing systems, evacuation drills, general disaster drills, traffic safety education, and training on aid activities following external accidents and disaster prevention. For quality management, every workplace separately organizes safety meetings and other opportunities for ISO-related education. Twenty-two key personnel at different workplaces have completed the ISO 9001 internal auditor development course. In September 2011, we organized a skills seminar for internal auditors with in-house lecturers.

RC Promotion Structure and Operation of Management Systems

Auditing Systems

Tokuyama has an auditing system aimed at verifying that individual factories and offices engage in appropriate activities in line with Companywide policies.

Safety and Environmental Audit

Tokuyama conducts safety and environmental audits on a yearly basis to verify the appropriateness of its accident/disaster prevention measures and management activities in relation to environmental conservation. The auditing team is headed by the director who chairs the Safety Measures Committee and the Environmental Measures Committee, and the team conducts audits of all factories, laboratories and offices, organizations designated for inspection under the High Pressure Gas Safety Act, the Purchasing & Logistics Department and the Health Management Center. The results of the audits are compiled in reports and distributed to all departments concerned. They are also presented to the president.

Third-Party Audit

Tokuyama undergoes ISO 9001 and ISO 14001 examinations conducted by accreditation organizations. The latest examination for renewal of the ISO 9001 certification took place in January 2012. The Company has implemented remedial measures for identified issues.

Examination for renewal of ISO 9001 certification at the Tokuyama Factory on January 25, 2012

Internal Audit

Tokuyama conducts internal audits on a regular basis in accordance with the ISO 9001 and ISO 14001 standards and with the occupational health and safety management system. The progress of action plans and the status of system operations are audited. If a problem is found, it is notified to related parties, and corrective actions are instituted.

Fiscal 2011 RC Activities: Priority Issues and Results

Category	Priority Issue	Results	Related Pages
Management	• Review by top management	• CSR Promotion Council • Safety and environmental audit	P10 P12-14
Environmental conservation • Environmental impact reduction • Energy conservation • Waste recycling	• Reduction in environmental impact (air, water quality, etc.) • Reduction in the emission of PRTR substances and hazardous air pollutants • Decrease in unit energy consumption • Promotion of zero-emission activities • Steady operation of the environmental management system	• Reduction in the emission of SOx, NOx, soot, etc. • Promotion of energy conservation • Facilitation of the use of waste as raw materials and fuel of cement production	P45 P46 P44 P34-35, P47 P12-14
Process safety	• Zero accidents • Promotion of risk management • Promotion of independent safety management	• Proper operation of the safety management system • All-inclusive safety and disaster prevention activities	P36-37
Occupational health and safety	• Zero disasters	• Efforts to maintain zero-disaster status • Promotion of risk assessment	P36-37
Chemical product safety	• Securing product safety	• Implementation of product assessment and labeling assessment • Improvement of MSDSs and promotion of research on new raw materials	P12-14
Cultivation of a relationship of trust with society and local communities	• Participation in community activities • Harmonious coexistence with society and local communities	• Participation in community volunteer activities • Holding of RC Community Dialogues (regional, organized by each factory) • Provision of factory tours	P40-41 P33 P32
Promotion of RC activities at Group companies	• Expansion of RC activities	• Safety, quality and environmental audits • Encouragement of ISO certification acquisition • Sharing of RC-related information	P50-51

Regaining the Trust of Our Customers

Measures against Plastic Window Sash Problem

Since we announced measures to prevent the recurrence of the mislabeling of fireproof specifications on plastic window sashes in March 2009, we have rallied the strength of the entire Group, aiming to regain the trust of our customers by stepping up prevention measures and efforts to complete the repair of customers' houses and other buildings to ensure legal compliance.

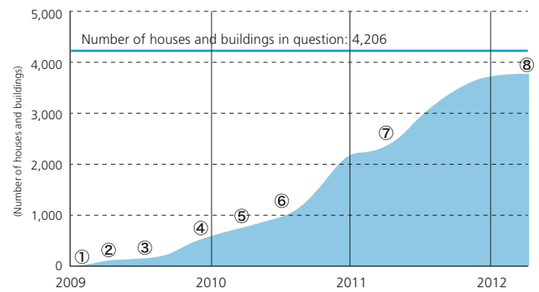
As for preventive measures, we have completed the formulation and implementation of "medium-term measures." The Group has developed structures for auditing and Group management and has strengthened its compliance system. Meanwhile, Excel Shanon Corporation expanded the scope of its ISO 9001 certification with the aim of bolstering its quality assurance system. These structures and systems are now in place operating effectively.

① January 2009:	Publically announced the mislabeling problem and set up the external investigative committee
② March 2009:	Received the external investigative committee's report and announced urgent, short-term and medium-term measures to be undertaken to prevent the recurrence of the problem
③ June 2009:	Completed the urgent measures
④ October 2009:	Introduced a test furnace at Excel Shanon's Kuriyama Factory
⑤ March 2010:	Completed the short-term measures Completion rate of repair work as of the end of fiscal 2009: 18%
⑥ June 2010:	Began introducing products newly authorized for repair use
⑦ March 2011:	Completed the medium-term measures Completion rate of repair work as of the end of fiscal 2010: 56%
⑧ March 2012:	Completion rate of repair work as of the end of fiscal 2011: 90%

On the other hand, the initiatives undertaken to repair customers' houses and other buildings to ensure legal compliance included the installation of a test furnace at Excel Shanon's Kuriyama Factory, the establishment of repair technologies and the proper acquisition of authorization for fireproof and fire-resistant specifications. The abovementioned initiatives led to significant progress in repair work in fiscal 2010. As a result, the Group had completed repair and replacement work for 90% of the affected customers by March 31, 2012. In fiscal 2012, backed by the strengthened cooperation between Tokuyama and Excel Shanon, we will strive to complete the remaining work, providing detailed repair services tailored to each house or building in need of repair.

Total number of houses and other buildings where the repair of the plastic window sashes in question was completed

(on the basis of the number of notifications submitted to the Ministry of Land, Infrastructure, Transport and Tourism)



Installation of fire-resistant parts

Replacement of plastic window sashes

Status of Implementation of Measures to Prevent Recurrence

Implemented by	Measures to Prevent Recurrence	Implementation Status
Tokuyama	① Enhance auditing system	• We defined checklists and executing bodies for audits of Group companies and clarified the division of roles in auditing. • We set the rule of mandating audits on the status of the acquisition of fireproof and fire-resistant authorizations by Tokuyama's individual divisions and departments and by Group companies.
	② Improve Group management mechanism	• We identified and evaluated risks inherent in fixed personnel allocation at Group companies. Evaluation results were shared across the Tokuyama Group and related parties to establish a system to cope with risks through collaborative efforts. • We created a database containing information about Group companies on Tokuyama's information network. Based on this database, we established a structure to promote information sharing among Tokuyama, Group companies and related parties.
	③ Strengthen compliance system	• We investigated the status of Group companies' compliance with laws, regulations, and internal rules and guidelines and gained detailed knowledge about their compliance status and systems. • We positioned the Corporate Social Responsibility Division as the body responsible for providing compliance-related instruction and education. Also, we strengthened our Groupwide compliance systems by, for example, opening the Compliance Study Room intranet site.
Excel Shanon	④ Expand the scope of ISO 9001 certification	• Previously, only certain manufacturing departments acquired the ISO 9001 certification. All divisions—including development, design and sales, as well as all factories, branches and sales offices—have completed the acquisition of the certification by July 7, 2010.

Tokuyama Malaysia produces polycrystalline silicon, an essential material in the manufacture of solar cells

Growing

Tokuyama Aggressively Expanding Growth Businesses

Under its Centennial Vision, Tokuyama aims to strengthen strategically growing businesses. Our polycrystalline silicon business is the mainstay among these growing businesses. Polycrystalline silicon has been developed as a material for electronic parts and components, particularly for semiconductor applications. In line with the ongoing development of the semiconductor industry, Tokuyama has steadily expanded this business, which has, in turn, contributed to the growth of the Tokuyama Group. In recent years, polycrystalline silicon has become indispensable in today's society, increasingly used for photovoltaic power converters in solar cells, the use of which is rapidly spreading as a means to curb global warming. In addition to the area of electronic parts and components for semiconductors, Tokuyama is concentrating its management resources on the environmental and energy field. By increasing the production capacity through its global production network, Tokuyama is working to further strengthen its world-class competitiveness in the polycrystalline silicon business.

The Bakun Dam hydropower plant in Sarawak State, Malaysia, supplies electricity to Tokuyama Malaysia's factory

Growing Business to Cultivate Solar Cell Applications

From the standpoint of strengthening its strategically growing businesses, Tokuyama began constructing a new factory in Malaysia. Serving as a base for the manufacture of polycrystalline silicon for solar cells, this new Malaysia Factory, when completed, will boast an annual capacity of 6,200 tonnes.

Tokuyama decided to build this factory on the back of the rapid expansion of the global renewable energy market. Worldwide economic growth was driven by the computer industry in the 1980s and by the network and IT industries in the 1990s. The world witnessed the evolution of financial technologies and then experienced the burst of the bubble economy during the first decade in the new millennium. Today, countries across the globe are entering the era of renewable energy. In particular, the introduction of photovoltaic generation is accelerating on a global scale, and photovoltaic power capacity has shown an average 10-time increase in major countries from the 2000 level, with world leader Germany boasting the largest capacity, at 5,500 megawatts peak (MWp).

To date, Tokuyama has operated its Tokuyama Factory in Shunan City, Yamaguchi Prefecture, Japan, as its sole manufacturing base for this material. The Tokuyama Factory is now capable of producing 9,200 tonnes of the material annually. With this capacity, the Company commands a world-class market share. However, market competition is ever-intensifying, reflecting market entries by South Korean and Chinese counterparts. By mass-producing polycrystalline silicon at the Tokuyama Factory and the new Malaysia Factory, we expect to boast an annual capacity of 17,200 tonnes in 2013. Moreover, as second-phase construction currently under way at the Malaysia Factory is completed, bringing its total annual capacity to 20,000 tonnes, the Group's annual capacity is expected to rise further, reaching 31,000 tonnes in spring 2014.

Through the strengthening of our capacity, we aim to maintain the current global share of more than 20% in polycrystalline silicon for semiconductor applications. For solar cell applications, we will work to more than double our market share from the current 5% (Tokuyama estimate).

New Business Model Initiated by the Sarawak State Government

Contributing to the Prosperity of Malaysian Industry with an Eco-Friendly Business Cycle

Overview of the Malaysia Project

In the Samalaju Industrial Park, which is situated in the state of Sarawak, Malaysia, the Company is currently constructing a factory for the manufacture of polycrystalline silicon. The anticipated annual capacity of the factory after the completion of first-phase plant construction in 2013 is 6,200 tonnes, a figure that is expected to rise to 20,000 tonnes with the completion of a second plant with a planned annual capacity of 13,800 tonnes. The groundbreaking ceremonies for first- and second-phase construction took place on February 16, 2011 and February 16, 2012, respectively. Construction of the factory is proceeding steadily along with the development of the area around the factory. Production at the first plant is scheduled to commence in June 2013.

The considerable cost of factory construction, which is estimated at approximately ¥200 billion, includes the installation of utilities (such as power transmission facilities and hydrogen generators) and the development of infrastructure (such as roads and wastewater treatment facilities). For first-phase and second-phase operations, Tokuyama plans to employ 1,000 people.

A number of Asian companies are expanding into the Samalaju Industrial Park, and it is growing into a huge factory complex. As the first Japanese company expanding into the park, Tokuyama is proud to be a "top runner."

Abundant Electricity and Human Resources

Tokuyama has long considered the establishment of a second polycrystalline silicon manufacturing base in addition to the one in Japan in light of diversifying risks and to respond to the expected medium- and long-term demand expansion for this material used in solar cells. Following careful examination of locations, the Company has selected the Samalaju Industrial Park in Malaysia. There were many reasons for the selection of this site, such as the region's sufficient electricity supply capacity, which is a prerequisite for the manufacture of polycrystalline silicon, the abundance of water resources for industrial use and highly educated human resources. In addition, Tokuyama will be able to receive preferential tax treatment and support for the acquisition of permits and licenses from the Malaysian federal government and the Sarawak state government.

The Samalaju Industrial Park boasts a site of 8,000 hectares. Within this vast site, Tokuyama has secured approximately 200 hectares with due consideration given to future extension. The first phase will involve factory construction on the site totaling approximately 40 hectares. The 2,400-MW Bakun Dam hydropower plant—situated about 200 kilometers south of the factory site—supplies electricity to the factory.

A Breath of Fresh Air from Malaysia to Rejuvenate Tokuyama

Akira Sanuki
Managing Executive Officer of Tokuyama Corporation, President of Tokuyama Malaysia Sdn. Bhd.

It has been a year and a half since the groundbreaking ceremony for the factory's first-phase construction. From my viewpoint, however, the Malaysia Project has only just begun. When I consider operating a company with a workforce of over 500 employees after production commences, I feel we have to move into high gear from here on out. It is a challenging task to establish a new company from the ground up, groping our way forward to open up a frontier, all the while under pressure to succeed.

I think the most critical stage of starting a new company in Malaysia is at the point of gaining recognition as a part of local society…or not. At this stage, Tokuyama's corporate character and dignity will be examined. Because of this, we are aiming to create a factory deeply rooted in the local community, focusing on nurturing local employees who have excellent personalities as well as high capabilities in manufacturing.

Tokuyama has been growing and accumulating its technologies over a history of many years in Japan, beginning in Shunan City, and the Company has nurtured an abundance of human resources. At present, 70 engineers in various fields have been deployed to Malaysia from the Tokuyama Factory, and, eventually, we will accept 120 such engineers. Of course, we note that due consideration must be paid when we bring our technology to different societies, no matter how excellent such technology might be. Such technology should be applied in line with the character and culture of the local society.

I admire the Japanese expatriates devoting their hard work to this project, and I believe that the value of their experience is redoubled by the considerable discretion and great responsibilities they have been entrusted with in Malaysia. This could never happen in domestic operations where everything is already prepared and settled. By returning with this experience, I expect that they will bring with them a breath of fresh air that will rejuvenate Tokuyama. By nurturing such globally capable human resources, Tokuyama Malaysia can also take a key role in realizing "Venture Spirit & Innovation," the underlying principle of Tokuyama's Centennial Vision.

As such, I believe that the Malaysia Project is essential for the Tokuyama Group to achieve true globalization.

View of pipe rack modules erected during first-phase construction in the background of groundwork for second-phase construction

Sarawak Corridor of Renewable Energy

Malaysia consists of 13 states and 3 federal territories. Since Mr. Najib Razak took office as Prime Minister of Malaysia in 2009, the entire country has promoted the spread of renewable energy use and the development of environmental technologies. Located on the island of Borneo, Sarawak is the largest state of Malaysia and has the fourth largest population among Malaysian states and federal territories. In accordance with its clean energy policy, dubbed Sarawak Corridor of Renewable Energy (SCORE), the state of Sarawak is accelerating its economic growth and development while strengthening invitations to participate in renewable energy projects. The Samalaju Industrial Park has been designated as an economic development area under SCORE, and Tokuyama's new factory is the first investment project undertaken in this area. Thus, expectations are heightening for this factory project to make significant contributions to the growth of environmental businesses promoted by both Japan and Malaysia.

Location of the Samalaju Industrial Park

New Business Model to Promote Clean Energy Development

In further developing solar cell-related industries, Malaysia is focusing on nurturing upstream businesses as well as downstream areas. Through such a focus, the country aims to establish a comprehensive value chain to bolster the competitiveness of these industries.

Tokuyama's polycrystalline silicon project in Malaysia involves the use of clean electricity generated at the Bakun Dam hydropower plant, which was constructed by the state of Sarawak, and the manufacture of polycrystalline silicon, a material used in solar cells. The solar cells that are manufactured based on our materials will, in turn, generate clean electricity, which will be used for the promotion of electric vehicles. In this way, we are working to establish an eco-friendly business cycle.

On the other hand, our project includes sophisticated manufacturing processes. Therefore, the project is expected to create and expand the employment of experienced engineers and highly educated workers. Furthermore, it will cause good ripple effects on local supporting industries, providing diversified business opportunities for many parties.

Bakun Dam

Situated 200 kilometers south of the Samalaju Industrial Park, the Bakun Dam is one of the world's largest dams at 205 meters in height and 750 meters in length at its crest. The dam can hold 43.8 billion cubic meters of water, more than the maximum storage capacities of all the dams in Japan. The surface area of the reservoir lying behind the dam is 695 square kilometers, equivalent to the land area of Singapore or the surface area of Lake Biwa, Japan's largest lake. Upon completion, the Bakun Dam hydropower plant will boast a power generation capacity of 2,400 megawatts, about the same as the output of two of the latest nuclear power generators. As the key component of the State of Sarawak's "Sarawak Corridor of Renewable Energy (SCORE)," it is representative of the abounding electricity resources of a state that has extended an invitation to a number of energy-intensive industries (see page 17 for a photo).


February 2011


September 2011


November 2011


December 2011


February 2012


February 2012


March 2012


May 2012

Passing on Tokuyama's "DNA" to Malaysian Staff

From left:

Yukinobu Aimoto
Manager, Manufacturing Section, Manufacturing Department, Tokuyama Malaysia Sdn. Bhd.

Tan Sheng Yong
Manufacturing Department, Tokuyama Malaysia Sdn. Bhd.

Nor Komariah
Manufacturing Department, Tokuyama Malaysia Sdn. Bhd.

Yasushi Okuno
Project Manager of TMP Project (PS-1), Tokuyama Malaysia Sdn. Bhd.

Keeping Malaysian Staff Highly Motivated

Yukinobu Aimoto
Manager, Manufacturing Section, Manufacturing Department, Tokuyama Malaysia Sdn. Bhd.

Currently, we have 94 Malaysian staff members participating in training, including those who received training in Japan last year. Our biggest challenge during training was communicating in English. Once we began training in Malaysia, however, we found that those who had already been studying in Japan were quick to grasp the material. Meanwhile, the communication capabilities of our Japanese expatriates are advancing day by day. Their improvement is beyond my expectations.

Another issue we face is raising safety awareness among Malaysian staff who have less experience in plant operations. We begin with giving them a thorough grounding in the importance of complying with predetermined rules and then move on to nurturing their risk sensitivity through in-the-field training.

We found that the Malaysian staff who returned from last year's training in Japan were better prepared and motivated to take leadership roles than staff who joined us this year. We recognize that one of our most important tasks is to establish a personnel system that maintains and further increases employee motivation. It should be noted that a high percentage of Tokuyama Malaysia's employees are women and that many are highly qualified individuals. In filling each position, the Company assesses employees' aptitude on an individual basis to ensure the right person is appointed to the right job.

I Would Like to Succeed through Career Development in Tokuyama Malaysia

Tan Sheng Yong
Manufacturing Department, Tokuyama Malaysia Sdn. Bhd.

Having graduated with a first-class honors degree in Mechanical and Manufacturing Engineering from Universiti Malaysia Sarawak (UNIMAS), Mr. Yong, now aged 25, began his career at Tokuyama Malaysia with a view to self-development.

Our present goal is to launch the new factory as early as possible and to stabilize its operations. I believe that we can benefit shareholders and contribute to the development of society while achieving prosperity by increasing the factory's return on investment through efficient and sustained operations.

On the other hand, I would like to gain experience in such areas as launching factory and trial operations in the field, and I would like to acquire various technologies and skills. My ultimate goal in doing so is to be a mechanical engineer engaged in the engineering design of plant processes.

Right after joining Tokuyama Malaysia, I was sent to Japan and given training with other Malaysian staff. At first, it was difficult communicating with the Japanese staff. For example, some of the same English-language technical terms are used in both the Japanese and Malaysian factories but the meanings are different. This hindered the exchange of ideas when we tried to communicate in English. However, our communication difficulties were eventually ironed out thanks to the great efforts of Japanese staff who tried to teach us with enthusiasm by painstakingly confirming every single technical term. In the end, the Malaysian staff's understanding and knowledge was deepened.

If I had missed out on the chance to join Tokuyama Malaysia, I might have been an everyday engineer doing only in routine work in some other factory, which would not be stimulating for me. The tasks I tackle in Tokuyama Malaysia are really challenging. In fact, operating a polycrystalline silicon factory is in no way simple. It requires great effort to acquire the techniques related to the production of polycrystalline silicon. By meeting challenges at Tokuyama Malaysia, I am developing my career and achieving success as an engineer.

I Would Like to Make Tokuyama Malaysia the No. 1 Company in Malaysia

Nor Komariah
Manufacturing Department, Tokuyama Malaysia Sdn. Bhd.

Born in Bahagian Miri, Sarawak, and a graduate of Universiti Malaysia Pahang (UMP) as a Bachelor of Science in Mechanical and Manufacturing Engineering, Ms. Komariah worked for another company before joining Tokuyama Malaysia. She is fond of mechanics and interested in the maintenance of the factory's facilities.

My goal is to make Tokuyama Malaysia the most sought-after company in Malaysia by increasing its profitability and publicity. To this end, the company is in need of excellent human resources. I would like to be one of those human resources—one who is diligent and bursting with a wealth of ideas. I see working with Japanese people as an excellent chance to further my own growth.

Looking back at my training period in Japan, I didn't know any Japanese while many of the Japanese staff had only poor English, and that made communication between us so difficult. Nevertheless, they were determined to pass on the knowledge needed to operate the factory production process to us. Inspired by their dedication, I became enthusiastic to learn what they could teach me, and I thought that I would really like to work with them. Consequently, I was able to learn about a number of advanced techniques and gain knowledge.

It has been about a year since I joined Tokuyama Malaysia. The hour-long commute by bus each way to Samalaju is a little long and hard, but I do not allow it to be an excuse not to do my best at work. In order to refresh myself, I sometimes visit my home in Miri or meet friends on the weekend, trying to make the most of my time.

If I had not entered Tokuyama Malaysia, I might never have had the chance to work in a factory, which was one of my dreams. Moreover, I would not have learned any technologies from Japan. I am so delighted to be part of Tokuyama Malaysia.

Laying the Groundwork for Growth in the Local Community

Yasushi Okuno
Project Manager of TMP Project (PS-1), Tokuyama Malaysia Sdn. Bhd.

Second-phase construction of our factory has been kicked off while first-phase construction has entered a key stage. It is very pleasing to see the factory taking shape day by day. On the other hand, I am feeling a heightened sense of mission to accomplish the project on schedule, seeing that we are drawing greater expectations from colleagues Groupwide, as well as attention from industry representatives outside the Group, as we approach the start of operations.

To develop the infrastructure associated with our factory, we engaged in negotiations with the government of Malaysia, the state government and territorial authorities on many occasions. Moreover, it took a lot of effort to manage construction firms with little or no experience in building a polycrystalline silicon factory with a high standard of quality. We encountered a number of challenges that were quite unlike anything we had encountered with similar projects in Japan. It was not simply a matter of language skill; I found it essential to present logical explanations and to take a broader perspective when entering into discussions with negotiating partners, giving consideration to their ways of thinking and customs. Also, I became aware that sometimes an approach that is thought to be normal in Japan has to be streamlined or modified in line with the local situation. As such, I believe that each member of staff must proactively think and act beyond the existing business framework in order to build Tokuyama Malaysia's foundations. Such foundations will, in turn, support us to develop as a company rooted in the local community.

Once we have created a factory that is able to operate safely and is steadily supported by the capabilities of its Malaysian staff, we will pass on our technologies to them so that they can maintain and improve plant operations on their own.

Nurturing Human Resources That Bolster Tokuyama's Growth on the Global Stage

A Key Factor for Sustained Growth—Nurturing and Utilizing Globally Capable Human Resources

Taishi Kutose
Executive Officer, General Manager of the Personnel Department

One of our basic strategies in the Centennial Vision is to strengthen strategically growing businesses. As a first step under this strategy, our Malaysia Project is now proceeding. To bolster those basic strategies, which encompass the pursuit of the Malaysia Project, we are putting emphasis on human resource-based management and CSR activities. To promote our management strategies, we believe that it is essential to nurture and utilize globally capable human resources, more specifically, those who are able to adapt to foreign cultures.

The training of Tokuyama Malaysia staff at the Tokuyama Factory is a key issue in the promotion of the abovementioned strategies. At the same time, we are trying to motivate the Japanese staff who work with them to proactively get involved in cross-cultural communication. Of course, the ability of the Japanese staff to work in a multicultural setting should be further enhanced so that they are prepared to engage in operations at the Malaysia Factory. There are many issues to be addressed.

As for the nurturing of Japanese expatriates, we need to build a personnel system that evaluates and identifies those who proactively enjoy the challenges, stress and even trouble associated with cross-cultural communication, the kind of employees who seek to transform themselves with a spirit of challenge through trials in their careers.

As for the Malaysian staff, since the majority of operations at Tokuyama Malaysia will be entrusted to them in the future, we recognize that a personnel system that is more suitable to this aim should be established.

Also key to a personnel system that enables staff to grow through their career development is the working environment. Take, for example, a childcare leave system. Such a system will not work if we go no further than formulating it; to function, the understanding and support of colleagues is required. We encourage employees' long-term career development by fostering mutual respect and creating a workplace that enables mutual support among our employees.

Basic Policy for Nurturing Human Resources

We seek to nurture those who have a strong awareness of the company's social mission and proactively take action toward the realization of that mission in a creative manner through continuous effort to enhance their competencies, develop their capabilities and support their character growth.

The Manjiro Plan: Nurturing Globally Capable Human Resources

In fiscal 2011, we launched the "Manjiro Plan," a new training plan that is open to all employees, aiming to nurture globally capable human resources. This plan is voluntary in order to encourage self-motivated participation. As employees gain wider experience under this plan, they are given further opportunities to take on the challenge of advanced training. The plan was named after John Manjiro, an important historical figure in Japan famous for his challenging spirit and determination, reflecting our wish for employees to be people who boldly stride forward and strive for achievement.

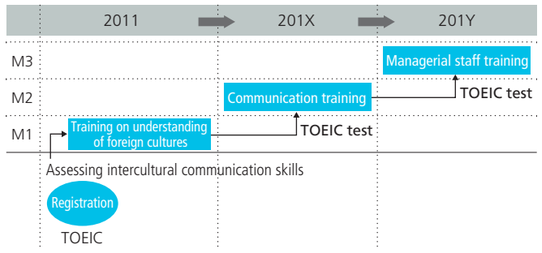
Participants in the plan must work independently and can move to the next step only after achieving success at the preceding level. This approach is quite distinct from the existing training system set up within the personnel system. However, it calls for the kind of assertiveness that is exactly what is required to uphold "Venture Spirit & Innovation," the underlying principle of Tokuyama's Centennial Vision.

The plan does not impose technically difficult assignments, rather, it places participants in situations where they are not able to communicate in their own language and their cultural norms may not apply. Such a situation throws a spotlight on the nature of the participant. The series of training sessions gradually builds character by forcing the participants to rethink what it means to respect each other and how to effectively work as a team.

The qualities that Tokuyama staff members acquire through the plan will grow more significant as we seek to bolster the future growth of the Group. This applies equally to operations in Malaysia, China and even Japan.

In addition, plans call for incorporating overseas training in actual operations to allow participants to learn what it is like to work overseas from the very beginning. Our wish for each employee is for him or her to summon the courage to take that extra stride toward a new frontier and success as one of the Group's key employees. This is the foundation of our Centennial Vision.

The Manjiro Plan



The Understanding of Colleagues Is Key to Reinstatement

Reinstated in October 2011 after one year of childcare leave, Ms. Yamasaki has been assigned to foreign trade control. Utilizing the flextime system, she works from 8:00 a.m. to 3:45 p.m. and is striving to balance her career and raising a daughter aged one year and seven months.

Miwako Yamasaki
Foreign Trade Control Department

In my fourth year after joining Tokuyama, I was seconded to Tokuyama Dental Corporation, which became an independent subsidiary of Tokuyama Corporation. Because of this, I had been away from the Head Office for a long time when I had my daughter. Accordingly, I was not abreast of the situation in the Head Office and had no idea about which department I would be assigned to when reinstated or what kind of work I was going to be given. In fact, the lack of information increased my anxiety, as I wondered how I was going to balance my career and raising a child. I believe that my case is not unique, but common to all of those who are on childcare leave.

At that time, a woman in the Personnel Department provided me with detailed information, responding to my inquiries over the phone and through e-mail. Thanks to her, I was able to choose the reinstatement plan best suited to me. Company magazines regularly delivered to my home kept me apprised of the situation at work and eased my anxiety.

I was assigned to my present position in the Foreign Trade Control Department just a year after my child was born. Right after I was reinstated, I felt guilty for causing inconvenience to my co-workers because I had to frequently take days off as my daughter kept running a fever. However, a female senior staff member in my department who had a three-year old child at the time gave me some concrete advice on both my career and raising a child that encouraged me a lot. I also appreciated my co-workers' willingness to cover my tasks when I needed to be absent. They showed a lot of understanding and offered warm encouragement. To meet their expectations, I would like to broaden my job role in export management and increase my knowledge in such fields as export-related laws, balancing all this with raising a child. Moreover, I would like to contribute to the Group's compliance as well as CSR activities to become a good role model for junior colleagues.

Sustainably Growing Company Regards Its Employees as True Stakeholders

Ichiyo Matsuzaki, M.D., Ph.D., is a researcher in the fields of industrial psychiatry and aerospace psychiatry at the Graduate School of Comprehensive Human Sciences, University of Tsukuba. Proactively tackling the health management problems of intellectual laborers, which include mental health diseases, Dr. Matsuzaki proposes labor management methods to create workplaces that are agreeable to both companies and their employees. Moreover, working in collaboration with the Japan Aerospace Exploration Agency, he is conducting research into the health management of astronauts working in unique environments that are completely closed to the outside world.

Ichiyo Matsuzaki, M.D., Ph.D.
Professor, Graduate School of Comprehensive Human Sciences, University of Tsukuba

In spring 2012, I went to Malaysia with a medical staff of ten to review the mental health of Japanese staff working at Tokuyama Malaysia. Right after the initiation of the Malaysia Project, Tokuyama dispatched a team of medical specialists and ensured that counseling was available for Japanese staff working at the local base. This kind of initiative enhances employee loyalty and motivation.

My impression is that it is part of Tokuyama's corporate culture to show a lot of consideration for their employees. I assume that this culture springs from the local community in Shunan City, Yamaguchi Prefecture, where Tokuyama is deeply rooted. As a medical specialist, I recognize that my role is to scientifically analyze such a desirable corporate culture, which in this case has grown out of tradition, and to utilize my expertise to convert it into something with a recognizable format that is transferable to next generation.

I am also involved in such fields as the selection of astronauts and stress management in outer space. In these and broader fields, my role is to support worker's mental health management scientifically and systematically by suggesting three major approaches to dealing with mental problems. First of all, I propose the course to take to maintain a mentally healthy, cheerful workforce that will continue to be productive. I call it "primary prevention." To this end, I provide education on health self-management and how to deal with stress. Second, I emphasize the importance of early detection as "secondary prevention." I encourage managers to contact me directly as soon as they notice mental problems in a staff member. Third, I provide support for the reinstatement of employees who take a leave of absence due to a mental problem. I carefully diagnose their symptoms and assess the root cause of their problem, for example, whether it comes from a personal issue or a workplace issue. In the latter case, the working environment should be improved. Thus, an industrial doctor and the Personnel Department must work together to respond to such mental health problems.

From the perspective of a mental health specialist, I believe that only a company generously treating its employees as important stakeholders can achieve sustained growth. Moreover, the above approach to employment management is thought to be the essence of CSR.

Support for the Balancing of Work and Raising Children

Tokuyama's employees can apply for childcare leave until their child turns two years old. Aside from such leave, male employees can take five days of paid childcare leave within eight weeks of their spouse giving birth. As for female employees, paid maternity leave is granted for a period up to six weeks prior to delivery and for the eight weeks following. To support the balancing of work and raising a child, eligible employees can work shorter hours from ten weeks before the delivery until their children enter elementary school. Moreover, flextime due to childcare is available from the time pregnancy is confirmed through the time the child graduates from elementary school.

FY	2006	2007	2008	2009	2010	2011
Number of employees utilizing childcare leave	3	11	6	5	7	10
Number of employees utilizing family-care leave	0	0	0	1	0	0
Number of employees utilizing flextime due to childcare	0	1	5	10	14	9

How Tokuyama's products are used in LED bulbs
(parentheses indicate the Company's products)

The entrance of Tokuyama's office in Tokyo features LED lighting

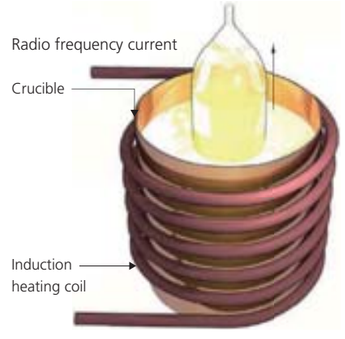
Creating

Tokuyama Creating New Technologies and Businesses

As it works to create environmental technologies and eco-friendly products, Tokuyama emphasizes social contributions and environmental impact reduction efforts, even from the development stage. Researchers today are under increasing pressure to quickly develop innovative technologies and new materials that meet the rapidly changing needs of society. Our R&D mission is to contribute to the healthy development of society by delivering such innovative technologies and new materials through continuous inquiry and ceaseless effort.

Focusing on three growth fields, namely, "information and electronics," "environment and energy" and "life and healthcare," we are leveraging the inorganic chemical and crystal technologies that we have accumulated over the years to accelerate product development. As the latest accomplishment of our R&D activities, we are proceeding with the commercialization of sapphire single crystal* wafers (150 millimeters or six inches in diameter) for LED chip manufacturing.

Manufacturing a Sapphire Single Crystal Using the "Czochralski (CZ)"** Method



* Single crystal: Crystalline solid in which all parts have the same crystal orientation

** The "Czochralski (CZ)" method, also known as the pull-up method, is a method of growing a cylindrical single-crystal ingot by bringing a seed single crystal into contact with the melted raw material and slowly pulling the seed crystal upward.

Large Diameter Sapphire Single Crystal Wafers Ideal for LED Chip Manufacturing

Sapphire single crystal wafers are commonly used for manufacturing LED chips that are used for illumination. Demand for such wafers is increasing, especially for use in the backlights of smartphones and liquid crystal televisions. Moreover, the ongoing changeover from conventional to LED lighting is expected to further expand the market for sapphire single crystal wafers.

Tokuyama's manufacture of sapphire single crystal reflects expertise accumulated over many years and begins with aluminum oxide that has been melted at a temperature of more than 2,000 degrees Celsius. A seed crystal is brought into contact with the melt of aluminum oxide and a crystalline lump, or ingot, forms around it as it is slowly pulled upward. We have established proprietary technology for this "pull-up" method of manufacturing a sapphire single crystal, which enables us to manufacture high-quality, large-diameter single crystals with minimal defects.

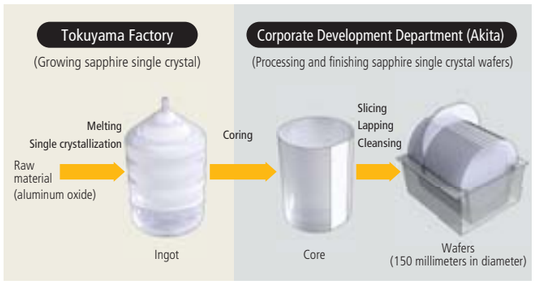
The sapphire single crystal is then thinly sliced to yield wafers for LED chips. Usually, such wafers range in diameter from 50 to 100 millimeters (from two to four inches). However, Tokuyama is able to produce larger wafers of up to 150 millimeters, or six inches, in diameter. This allows a larger number of LED chips to be produced from one wafer and is thus expected to significantly help LED chip manufacturers improve their productivity as well as product quality.

Initiatives Undertaken by the Corporate Development Department (Akita)

In October 2011, we completed the construction of a new verification testing facility for the development of sapphire single crystal wafers (the Corporate Development Department (Akita)) in Misato-cho, Senboku-gun, Akita Prefecture. Trial operations were initiated in November 2011, with the facility processing sapphire single crystal ingots made at the Tokuyama Factory and producing wafers for LEDs.

Our decision to expand in Akita was backed by such factors as the generous support offered by the prefectural and municipal governments of Akita, the surrounding area's abundance of clean water, which is indispensible to the manufacture of wafers, and the fact that a number of optical instrument manufacturers with excellent technological capabilities are already operating in the area.

Tokuyama is assiduously working to commercialize sapphire single crystal wafers for LEDs as quickly as possible.



Tokuyama's Technologies Shaping the Future of Eco-Friendly Cities

Through the proliferation of solar energy and fuel cell use, Tokuyama's technologies are contributing to the realization of a society underpinned by a distributed energy infrastructure.

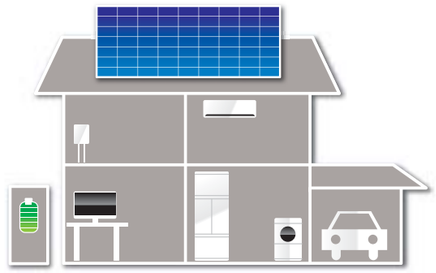
When we consider global warming and resource depletion, we come to a conclusion: an energy-intensive society can no longer continue unchecked; we must do something about this. In the near future, we will see the realization of a society where general households are using solar power generation systems and electric vehicles, and, in turn, such systems and vehicles are each connected to power stations via a communications network to ensure efficient energy use in every aspect of living. It is expected that new buildings will be equipped with renewable energy systems and be built using construction materials that boast excellent heat insulation and dissipation properties. It is also expected that new urban development projects will increasingly involve ground enhancement so that soil liquefaction is not caused by earthquakes and other phenomena.

Today, the entire world is witnessing the development of eco-friendly, future-oriented cities in various locations, shifting away from the urban development model of the 20th century. Through the provision of polycrystalline silicon for solar cells and various materials for fuel cells, Tokuyama is contributing to the development of such cities.

Electrolyte Membrane for Fuel Cells

Roughly 20% of worldwide CO_2 emissions is attributable to automobiles. The shift to electric and fuel-cell cars will definitely have a significant effect on the reduction in the environmental impact of society at large. By offering electrolyte membranes and electrode catalysts, Tokuyama is contributing to the spread of fuel cell use.

Heat sink substrates for rolling stock and automotive motors: Tokuyama's aluminum nitride ceramics Shapal® is used as heat sink substrates for power semiconductors controlling the motor output of hybrid cars. The use of Shapal® enables the longer service life of power semiconductors and the higher output of motors. Shapal® contributes to effective heat dissipation in various electronic devices as well.



Polycrystalline Silicon for Solar Cells

The effective use of solar energy underpins eco-friendly, future-oriented cities. Through the worldwide supply of polycrystalline silicon for solar cells, Tokuyama is helping realize a society supported by a distributed energy infrastructure.

Plastic window sashes: The Shanon Window®, which combines a high-performance plastic window sash with a double-glazed window, is an environmentally conscious product that reduces the energy consumption of housing and thereby contributes to a reduction in CO_2 emissions. With triple the thermal insulation properties of an aluminum-sash, single-glazed window, the Shanon Window® boasts excellent airtight, sound proof, and moisture condensation proof characteristics. Moreover, during this product's manufacturing process, we are promoting material recycling by recovering and reusing plastic offcuts and waste products and minimizing the amount of waste to be disposed of.

Aluminum Nitride Filler for LED Lights

In general, LED bulbs consume 10% of the electricity consumed by filament bulbs. Tokuyama provides such products as aluminum nitride fillers, which contribute to the improved luminosity, lighter weight and longer service life of LED bulbs, and is engaged in the development and commercialization of sapphire single crystal wafers for LED chips.

Silica: Tokuyama's silica products are used for wide-ranging applications, including silicone encapsulants, polishing agents for silicon wafers and encapsulants for semiconductor packages.

Cement/soil stabilization material: Tokuyama's cement and soil stabilization material is becoming increasingly important as a basic material to support safety and security in people's lifestyles. Meanwhile, in environmentally advanced cities, buildings are required to have a greater level of heat insulation properties and energy efficiency. By providing a variety of exterior and interior construction materials, Tokuyama is contributing to eco-friendly urban development.

Creating Environmental Technologies

Tokuyama's R&D Facilities Creating Innovative Technologies

Mission of Tokuyama's R&D

Recent years have seen rising concerns about environmental and energy issues. In line with such a trend, innovative materials relating to clean energy and energy-saving technologies, including those for solar power generation and LED lighting applications, are drawing attention from industries across the board.

Like those in other industries, Tokuyama's researchers and engineers are required more than ever before to quickly develop new technologies and materials to accommodate needs that change along with advances of the times. The R&D sphere is also increasingly involved in globalization, which in turn, further intensifies development competition. Reflecting this, there is a growing need to accelerate R&D efforts in new technological and product areas, further increasing the difficulty of R&D projects.

In order to expand its business while contributing to society as a chemical maker, Tokuyama must continue to create "Only One" or "No. 1" technologies and products ahead of its competitors. To this end, we are focusing on the development of new materials and innovative technologies, utilizing the expertise we have accumulated over many years in such areas as silicon-related materials, aluminum nitride and ion exchange membranes as well as crystallization technologies, electrolytic technologies and fine particle technologies. We will promote efficient and timely R&D, striking a balance between short-, medium- and long-term projects.

As a manufacturer, in addition to cost reductions through the improvement of manufacturing processes, Tokuyama sees the development of new materials and innovative technologies as an ever-present challenge. Through constant inquiry and ceaseless effort, we will continue to contribute positively to a changing society—this is the mission of our R&D activities.

R&D Structure

With regard to its R&D structure, Tokuyama's Research & Development Division is in charge of medium- and long-term research and development and the Company maintains both a Development Department and a Planning Department in each business division. Through these departments, the Company is advancing R&D projects that place particular emphasis on relationships with its customers. In addition, the Research & Development Division's subordinate departments, including the Intellectual Property Department and RC Research Laboratory, support corporate-wide R&D activities.

Corporate Development Department

The Corporate Development Department maintains its independence from Tokuyama's business divisions and undertakes R&D projects to create new products and businesses that will support the sustainable growth of the Tokuyama Group. Setting their sights on achieving the medium-term sales targets of each new product in fiscal 2017, the year of Tokuyama's centennial anniversary, individual project teams are steadily pursuing development themes with an eye to the commercialization of new products.

While working together as one toward the commercialization of new products, the members of each project team not only pursue the development of innovative technology, but also take into consideration factory construction surveys, marketing surveys and quality assurance. Moreover, as a long-term target we aim to develop and commercialize new materials that support an energy revolution. Pursuing this target, we are developing innovative technologies that center on technologies and materials in areas in which we are highly competitive while cooperating with universities and other research institutions as needed. By doing so, we are moving toward the creation of new products and new businesses that offer solutions for future energy issues, in line with our R&D mission.

As for ongoing projects, we are advancing the development of electrolyte materials for use in fuel cells, which are increasingly recognized as a clean energy source, leveraging our strengths in ion exchange membranes and electrochemical technologies. In addition, we aim to supply large diameter sapphire single crystal wafers for use in LED chips, utilizing the single-crystal growth technologies that we have accumulated over the years.

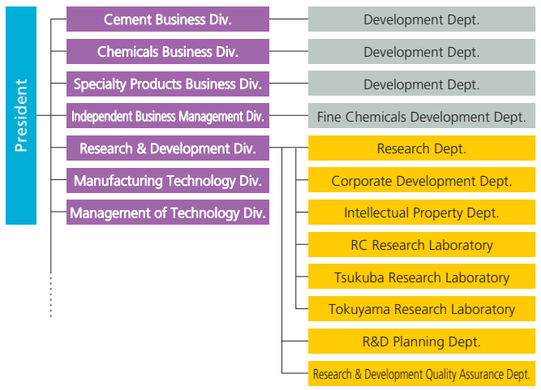
Research Department

We are seeking to strengthen our technological competitiveness to increase the growth potential of existing businesses while working to create new products and new businesses that may become future growth drivers. To this end, the Research Department searches for future technologies, next-generation technologies and new materials. Reflecting the fruits of the abovementioned search, we are drawing up R&D themes and seeking to create the seeds of new technologies under these themes. Once a proprietary technology based on such a seed is established, the Corporate Development Department and Development Departments in each business division move toward the commercialization of new products.

As we search for R&D themes, we are focusing on three growth fields, namely, "information and electronics," "environment and energy" and "life and healthcare," and seek to fully utilize materials and technologies in areas in which the Group is highly competitive. On the other hand, we also proactively seek to introduce technologies from external organizations such as universities, when we find those technologies necessary.

Moreover, drawing on a wide range of technologies we are striving to enhance our technical capabilities by creating synergies in close cooperation with Development Departments placed at each business division and technology development sections of our affiliates.

Tokuyama's R&D Organization




RC Research Laboratory

Intellectual Property Department

As a manufacturing company, Tokuyama must create and effectively utilize intellectual property to achieve sustainable corporate growth and make social contributions. Tokuyama's Intellectual Property Department adheres to the basic policy of "maximizing the Company's corporate value through the creation and effective utilization of intellectual property." In line with this policy, the Intellectual Property Department works to protect the outcome of the Company's R&D activities through the appropriate management of intellectual property rights. At the same time, it conducts risk management to ensure that the Company respects the intellectual property rights held by other parties.

By securing the outcome of product and technology R&D—the crystallization of the wisdom of Group researchers—through the establishment and management of intellectual property rights, the Intellectual Property Department strives to maintain the competitiveness of Tokuyama's operations. Moreover, the department implements intellectual property strategies closely linked with business and technological strategies to maximize the utilization of its intellectual property portfolio. As the Tokuyama Group bolsters business globalization, the department will strategically manage the Company's patents and other intellectual property rights in Japan and overseas. In doing so, the department will vigorously promote the creation of new businesses and strengthening of existing businesses toward the realization of Tokuyama's Centennial Vision, thereby contributing to the enhancement of the Group's corporate value.

R&D Expenses

Tsukuba Research Laboratory

The Tsukuba Research Laboratory is situated in the peaceful setting of Tsukuba Science City in Ibaraki Prefecture. This laboratory conducts research on fundamental and advanced technologies from a medium- and long-term perspective while promoting research in medical products and organic fine chemicals. Also, the laboratory goes beyond basic R&D for functional materials, performing applied R&D for systems and services.

Tokuyama Research Laboratory

Located within the Tokuyama Factory site, the Tokuyama Research Laboratory is in charge of the Company's core R&D. Taking advantage of its close proximity to the Tokuyama Factory, this laboratory incorporates requests from business divisions into its product development in a timely manner. Covering wide-ranging fields—from basic chemical products to cement—the laboratory undertakes basic and applied R&D as well as process development.

RC Research Laboratory

Positioned under the Research & Development Division, the RC Research Laboratory focuses on the development of cutting-edge technologies to analyze materials while supporting R&D activities aimed at creating new businesses that will underpin the future growth of the Tokuyama Group. To enable Tokuyama to protect the global environment and promote business activities centered on product safety, this laboratory applies its expertise in environmental analysis and risk assessment, maximizing the effectiveness of the Group's Responsible Care activities.

The factory's tallest smokestack is 200 meters high and is a popular landmark of local residents

Integrating

Tokuyama Bolstering International Competitiveness

"The Tokuyama Factory is always on the side of local communities of Shunan City."

The sources of competitiveness of our Tokuyama Factory are the unparalleled energy efficiency and superior technologies that we have nurtured at the frontlines of manufacturing operations. With pride and a strong awareness of being one of the largest plants in Shunan, the birthplace of the Company, we are providing society with high-quality, highly efficient products while paying the utmost attention to safety.

Placing top priority on remaining a factory that deserves the trust of local communities, we are solidifying the foundation of the Tokuyama Factory as a Mother Factory of the Tokuyama Group.

Developing the Tokuyama Factory into Our "Mother Factory"

We are working to improve the productivity at our Tokuyama Factory and on a Groupwide scale through the reestablishment of manufacturing and information infrastructures. To strengthen our manufacturing infrastructure, we have positioned the factory as the Company's "Mother Factory" responsible for the Tokuyama Group's technologies and expertise. Based on this positioning, the Tokuyama Factory will accelerate collaboration with the Kashima Factory and other factories operated by Group companies. The Tokuyama Factory boasts advantages in the manufacturing processes and technologies required to launch mass production after product development is completed. We will leverage these advantages—fostered through operations at the frontlines of manufacturing technology development—to expand our global operations. In addition, Tokuyama will optimize its production network and promote cost reductions and awareness-raising through steady, thorough rationalization, thereby bolstering its international competitiveness—a growth strategy under its Centennial Vision.

To enhance its information infrastructure, Tokuyama has been promoting the introduction of an enterprise resource planning (ERP) system Groupwide. Through the reinforcement of management accounting, we will work to improve the productivity not only in our manufacturing divisions, but also our back office divisions.

Sophistication in System and Process Integration

The Tokuyama Factory is located within the Shunan Petrochemical Complex in Shunan City, Yamaguchi Prefecture, and it is the Company's core production base, integrating diverse manufacturing operations. The Tokuyama Factory consists of the Higashi Plant, which produces polycrystalline silicon and organic chemicals, the Tokuyama Plant, which mainly produces soda ash and other inorganic chemicals, and the Nanyo Plant, which produces cement. These plants and production facilities work together to effectively use raw materials, products and by-products, and the Tokuyama Factory has constantly pursued its vision of becoming an integrated production base, where energy, materials and technologies support close links among different businesses.

At the heart of the integration at the Tokuyama Factory is its in-house power plant, which boasts one of the largest capacities in Japan at 552,000 kilowatts. The electricity and steam generated are supplied through power lines and pipes to each plant. In addition, the Tokuyama Factory has been making exhaustive efforts to recycle waste generated from within and effectively use such waste as fuel and raw materials for cement production. Thanks to these efforts, the Tokuyama Factory achieved a zero-emission rate of 99.9% in fiscal 2011.

Creating a Factory That Interacts Proactively with Local Communities

Tokuyama's manufacturing operations originated in Shunan City (the former Tokuyama City). With the pride of being one of the largest plants in Shunan, we are providing society with high-quality, highly efficient products while paying the utmost attention to safety. With the aim of creating a factory that interacts proactively with local communities, we have been promoting communication with local people through such initiatives as inviting them on factory tours, aiming to gain the confidence of local society.

Factory Tours for Employees' Families

A factory tour for employees' families was held on August 22, 2011, welcoming 63 people from 23 families wishing to see their loved ones at work, something they do not usually get to see. After a briefing on the Company sprinkled with quizzes, participants climbed aboard a bus and the tour began. As the tour bus neared the gigantic smokestacks and huge piles of salt, cheers broke out from the children. Later, such comments as "my dad looked good when he was working," "it is amazing he can work in such a hot place" and "I would like to join Tokuyama when I grow up" were heard from the children. It was impressive to see that they became even prouder of their parents after seeing them in the workplace.

Families participated in the factory tour

Tokuyama Factory Tour Map

Tokusou Bridge

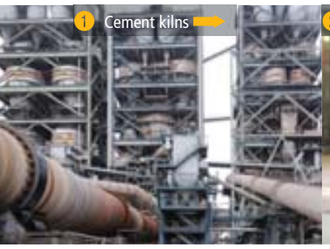
A bridge over the Tonda river, 145 meters in length. This stretch of the river is known as a good fishing spot for *Chinu* (black sea bream) among local fishing fans.

Members of women's associations toured the factory after the dialogue

Tokuyama Factory RC Community Dialogues

On August 18, 2011, the fiscal 2011 RC Community Dialogue took place at Tokuso Kaikan. With the objective of gaining the understanding of community associations around the Tokuyama Factory concerning the Company's environmental, safety and disaster prevention efforts, this event was the eighth of its kind. In addition, this dialogue invited women's associations, following in the footsteps of the third dialogue, which was held five years ago.

The event drew 27 participants from women's community associations and two from the Shunan City Government. Ms. Tsubokane, chief of the Environmental Policy Division of the Shunan City Government, delivered a presentation on the environment of Shunan City. From participants, we heard such comments as "I was impressed with Tokuyama's prompt actions against the problems of noise and dust," "I was surprised to see the factory is so clean," "I feel safer now after hearing about the fully equipped disaster prevention facilities and superbly trained staff" and "I would like Tokuyama to continue operations aimed at inspiring the dreams of children." Looking ahead, we will continue to pursue our voluntary management activities to remain a factory that deserves the trust of local communities.



1 Cement kilns

Our cement production plant is contributing significantly to the enhancement of the Tokuyama Factory's zero-emission rate.

2 Plant for making waste plastic-based fuel

Waste plastics crushed at this plant are used for fuel in cement production.

3 Central power plant

All of the electricity needed to run the Tokuyama Factory is covered by in-house power generation, which is a core function of the factory. The plant stably supplies low-cost energy to other plants in the factory.

4 Salt piles

Salt is essential to the production of Tokuyama chemical products. Transported from Mexico and Australia, salt is directly offloaded at the factory dock called the "salt wharf" from large cargo vessels.

5 Caustic soda manufacturing plant

This plant is equipped with the latest "zero-gap electrolyzers."

6 Soda ash plant

The soda ash plant is where Tokuyama's operations began. Soda ash is a basic raw material for such products as glass and soap and is utilized in a variety of other industrial fields.

7 Vinyl chloride monomer plant

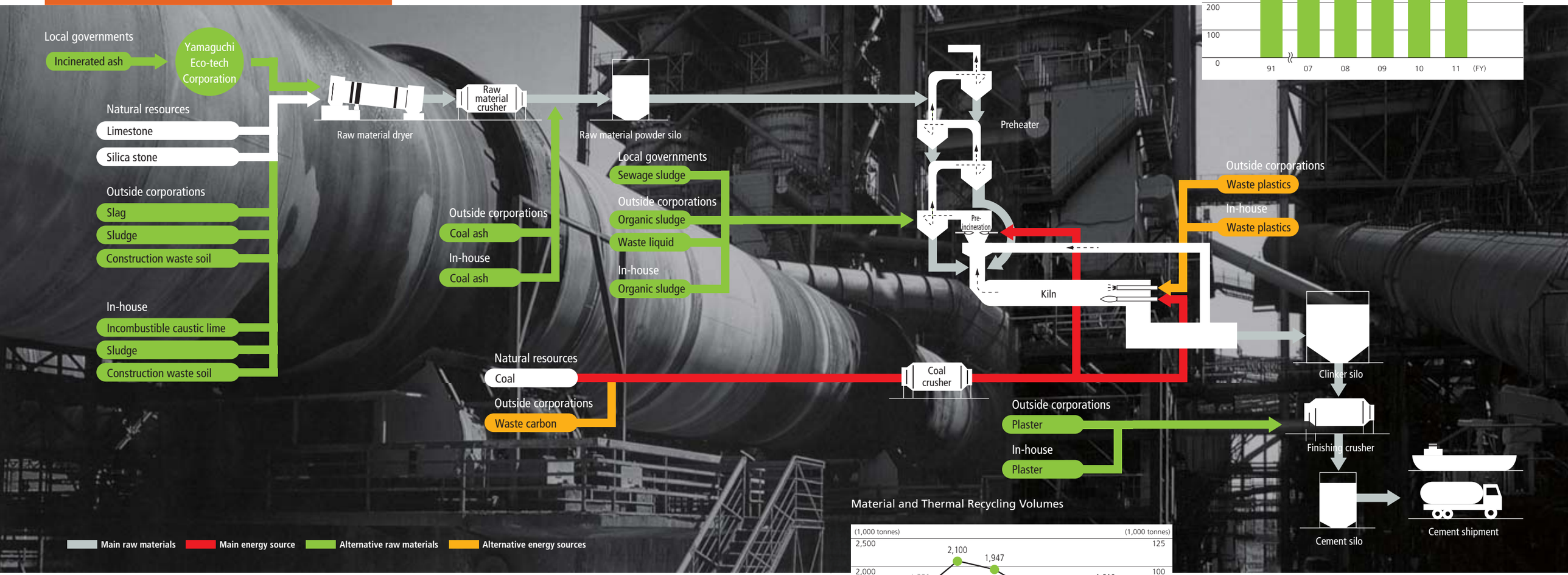
Utilizing chlorine gas, which is a by-product of the caustic soda production process, this plant manufactures a raw material for vinyl chloride resin.

8 Polycrystalline silicon plant

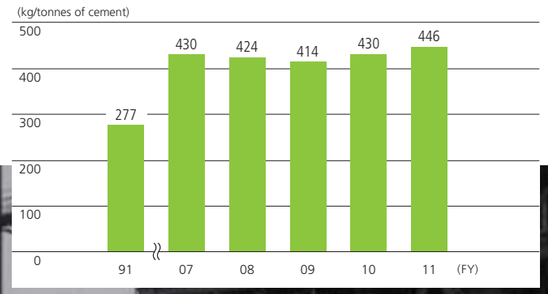
The polycrystalline silicon manufactured at this plant is an essential material used in silicon wafers for semiconductor applications and solar panels.

A Recycling Approach That Is Responsive to the Needs of Society

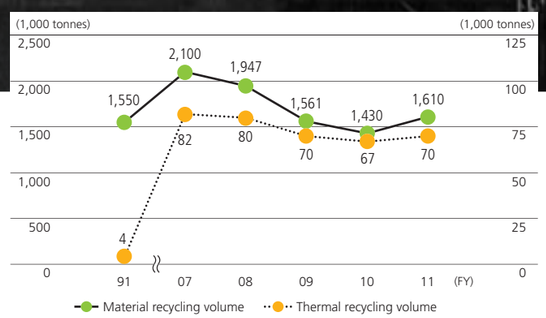
Recycling System in the Nanyo Plant's Cement Production



Unit Consumption of Waste and By-Products



Material and Thermal Recycling Volumes



Proactively Accepting Waste from Local Communities and Other Companies

Since the start of its operations, the Nanyo Plant, a cement production base within the Tokuyama Factory, has been promoting the reuse of by-products and waste—such as incombustible caustic lime from the Company's soda ash plant and coal ash from the in-house power plant—as alternative raw materials for cement production. In addition, the Nanyo Plant proactively accepts a significant volume of waste and by-products from local communities and outside corporations, promoting a recycling approach that is responsive to the needs of society. For example, the Nanyo Plant accepts sewage sludge as well as incinerated ash generated from household waste from local governments within and outside Yamaguchi Prefecture for reuse as alternative raw materials for cement. More specifically, incinerated ash generated at local incineration plants is sent to Yamaguchi Eco-tech Corporation, which then removes chlorine and other substances unwanted for cement production from the ash to improve ash quality to a level sufficient for reuse. The Nanyo Plant accepts this processed ash.

The Nanyo Plant also accepts and reuses a variety of waste and by-products generated through the business activities of other companies, including slag from steel manufacturers, coal ash from power companies and sludge from paper manufacturers. In particular, Tokuyama has proactively developed technologies for reusing burnable waste, including waste plastics, to reduce the use of fossil fuels. Having developed a technology to enable the stable injection of large quantities of crushed plastics from the front of its cement kiln, in 1999 Tokuyama became the first Japanese cement maker to establish a plant with waste plastic crushing and combustion facilities. The Company has continued to expand the plant's crushing capacity ever since and the plant is now equipped with seven crushing machines as well as three combustion lines that enable it to accept more than 100,000 tonnes of waste plastics a year.

The temperature in the cement kiln reaches 1,800 degrees Celsius. At this high temperature, the waste used as an alternative thermal energy source is completely combusted, leaving only ash, which is then used as an ingredient for cement. This makes our cement kiln quite unlike typical incinerators in that it generates no burnt residue. Therefore, it can be said that the abovementioned recycling and reusing methods are ideal technologies as they produce no hazardous substances emissions or secondary waste.

Low-moisture sludge facilities

High-moisture sludge facilities

Coal ash facilities

Process Safety, Disaster Prevention and Occupational Health and Safety

Tokuyama believes that safety is an essential part of business activities and that ensuring safety is the first step in achieving coexistence with society. In taking this stance on safety, Tokuyama thoroughly conducts process safety and disaster prevention activities as well as occupational health and safety efforts. By doing so, the Company endeavors to prevent accidents and disasters while striving to provide a favorable working environment.

Commitment to Safety and Disaster Prevention

• All-Inclusive Safety and Disaster Prevention Activities

Tokuyama has three safety principles. According to these principles, safety is, in the first instance, a social responsibility to be met as a corporate citizen. Second, safety is given priority over all other business activities; and third, security can be achieved by the fact that all staff members have a responsible attitude and engage in responsible activities.

In line with these principles, we make painstaking efforts to ensure the safety of facilities and processes. Specifically, we continually strive to improve our level of security control, identify the sources of hazards and enrich our security education and training. Accordingly, we promote such efforts as safety patrol operations, Kiken Yochi (KY) hazard prediction activities, Hiyari Hatto accident prevention activities, the five-S activities,*1 as well as the practice of pointing and calling a name out loud. In addition to these basic activities, we operate and continuously improve risk management and crisis management systems.

We have also launched a project for formulating countermeasures against earthquake and tsunami at the Tokuyama Factory in response to the occurrence of the Great East Japan Earthquake. Current project activities include discussions now under way from the viewpoint of disaster prevention.

Moreover, we renewed our full-size fire engines that carry special chemical agent equipment and introduced video transmission devices to enrich our disaster prevention system.

*1 Five-S activities: An initiative to ensure the five-S features at the workplace. The five-S's refer to Seiri (tidy), Seiton (organized), Seiketsu (clean), Seiso (cleaning) and Shitsuke (disciplined).

• Disaster Drills

Tokuyama conducts a variety of disaster drills including general disaster drills in tandem with the Shunan City Government.

The New Year's Fire Review (January 20, 2012)

• Encouraging Voluntary Safety Activities

The Tokuyama Factory is accredited as a certified safety inspection operator and a certified completion test operator for twelve facilities pursuant to the High Pressure Gas Safety Act and is qualified to continuously operate boilers and other equipment.

In fiscal 2010, we renewed our accreditation under the High Pressure Gas Safety Act. Moreover, we renewed and additionally obtained certification allowing the biennial open inspection of boilers and other facilities in fiscal 2011 and submitted to an on-site investigation assessing our eligibility for quadrennial open inspection (Under Japanese law, unless otherwise certified, industrial boilers must be inspected annually). In addition, we implement the plan-do-check-act (PDCA) cycle in safety management with complete consistency. While raising the awareness of safety among all workers, we endeavor to prevent accidents and disasters.

• Efforts to Maintain the Safety Performance and to Prolong the Accident-Free Period

Our safety and disaster prevention activities have been promoted to meet the goals of achieving a zero-accident and zero-disaster status by creating and nurturing a safety-oriented culture while ensuring the safety of people, facilities and society.

In fiscal 2011, we invested about ¥430 million for the purpose of safety and disaster prevention.

In addition to safety management activities based on comprehensive line management, the Tokuyama Factory has developed safety activities under the Safety Day initiative. We also proactively held dialogues on safety with our contractors. However, one on-the-job accident forced a Tokuyama employee to take a leave of absence while a similar incident involved contractors, preventing us from accomplishing the target of completely eradicating on-the-job accidents. An accident occurred at the Kashima Factory as well, ending an unbroken record of 26 zero-accident years dating back to its inauguration. On the other hand, the Tsukuba Research Laboratory has maintained its zero-accident and zero-disaster status for 14 years.

We will continue our efforts to protect all workers from accidents.

Safety Audit (Kashima Factory)

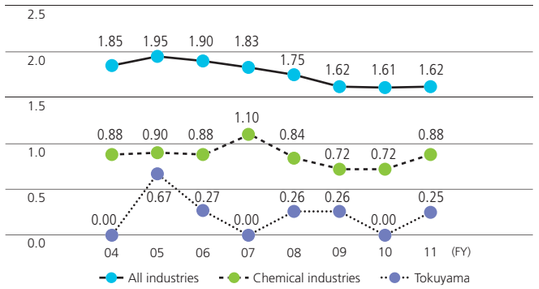
Commitment to Occupational Health and Safety

• Promoting the Safety Management System

Tokuyama has established Occupational Health and Safety Management Systems for individual factories, laboratories and offices. The systems were put into operation in fiscal 2003. In fiscal 2005, the Tokuyama Factory upgraded such a system into a comprehensive Safety Management System to additionally support process safety activities. This factory continues to make improvements by performing risk assessment in terms of work, facilities and processes with a view toward completely removing potential risk factors.

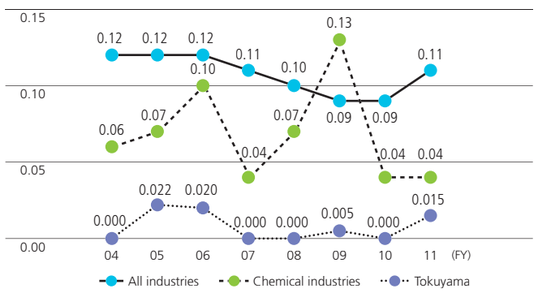
To enhance safety management to the level required for voluntary safety management accreditation, we have enlarged the scope of risk assessment (reporting issues to be addressed by Hiyari Hatto accident prevention activities and conducting risk assessments of such issues) while reviewing and improving the measurement process to determine the effects brought by changes of safety management methods. In fiscal 2011, the Company invested about ¥240 million to enhance and strengthen occupational health and safety.

Trend in the Accident Frequency Rate*2



*2 The accident frequency rate refers to the number of workers forced into absence through industrial accidents per one million cumulative working hours. This reflects the frequency at which industrial accidents occur.

Trend in the Accident Severity Rate*3



*3 The accident severity rate refers to the number of lost work days per one thousand cumulative working hours. This reflects the magnitude of industrial accidents that have taken place.

• Implementation of Safety and Health Activities in Concert with Contractors through Active Dialogues on Safety

By holding active dialogues on safety, Tokuyama and its contractors share their wisdom and eliminate potential risks associated with work in the field, thereby collaboratively promoting safety management activities. These activities include:

1. General joint meetings on safety and health in which employees of both Tokuyama and its contractors participate as well as departmental joint meetings on safety and health that involve dialogues aimed at enriching training on and support for safety
2. Safety checks at the worksites of contractors and training on and support for the inspection of facilities
3. Safety patrols at construction sites, including joint patrols to provide training and support
4. Hazard experience education and training, dialogues on safety, training and support for each section.

In these ways, Tokuyama is striving to safeguard all personnel working at its plants from accidents and disasters.

• Maintaining a Favorable Working Environment

With the goal of ensuring a comfortable working environment conducive to good mental and physical health, we implement such steps as continually taking measurements at worksites where specified chemical substances and organic solvents are handled. Our industrial doctor inspects these worksites and we take other steps to improve facilities and working methods.

At present, all worksites at every factory, laboratory and office fall under Control Category I.*4 We have introduced tighter voluntary standards for the purposes of improvement.

To combat lifestyle related diseases, in fiscal 2011, we provided health guidance through face-to-face counseling based on the results of health check-ups and issued written notifications to encourage those who failed to undergo a recommended complete checkup to do so. Consequently, a large number of employees underwent secondary health checkups. As for measures against mental health problems, we conducted an online survey on occupational stress that covered all Tokuyama staff. Based on the survey results, our medical care personnel offered treatment to those who seemed to be having problems.

*4 Control Category I refers to the state in which the concentration of hazardous substances in the atmosphere does not exceed the standard control concentration in most (at least 95%) worksite units. There are three control categories, namely I, II and III. Control Category I corresponds to the most desirable condition.

Expanding Infrastructure to Support the Development of Local Communities

Tokuyama's Procurement Policies

Tokuyama's Purchasing & Logistics Department adheres to procurement policies emphasizing: (1) stability; (2) strict compliance; (3) eco-friendliness; and (4) economic efficiency. Tokuyama heavily relies on overseas suppliers for the procurement of the raw materials and fuels it uses. Therefore, it is important how we meet these policies through our procurement operations, particularly those undertaken with overseas suppliers.

Coal—An Essential Fuel Powering the Tokuyama Factory

One of the foundations of our "mother" Tokuyama Factory is its in-house power generation capability, which supplies the substantial amount of electricity required to run its manufacturing and other operations. This low-cost energy source makes the factory internationally competitive. The power plant is coal-fired, consuming approximately two million tonnes of coal per year, all of which is imported using large bulk carriers including 90,000-tonne bulk carriers, the largest among ships of this kind. The procurement of coal with strict adherence to the aforementioned policies requires that we continually work to develop and augment our transportation infrastructure. In the following section, we introduce our initiatives to develop such infrastructure.

Strengthening Tokuyama's International Competitiveness and Revitalizing the Shunan Area

In recent years, the size of the bulk carriers used to transport coal has increased worldwide. The larger the carrier, the more coal it can carry and the greater the reduction in transportation costs. On the other hand, such bulk carriers cannot operate without sufficiently deep harbors and docks equipped with the requisite infrastructure, including a quay wall.

In many locations overseas, harbors boast large-scale dock infrastructure capable of accommodating bigger vessels. In Japan, however, such infrastructure is less common so shippers must use smaller vessels. This negatively impacts the international competitiveness of Japanese industry.

In 2008, Shunan Bulk Terminal Co., Ltd. was established with the aim of strengthening the international competitiveness of the Shunan Petrochemical Complex and contributing to the local economy. In the same year, Tokuyama Kudamatsu Port was designated as the nation's first Waterfront Industrial Area Promotion Port* and Shunan Bulk Terminal took on the role of developing the facilities required to handle cargo distribution. In April 2012, following the completion of the facilities, Shunan Bulk Terminal launched full-scale operations.

Shunan Bulk Terminal rents the whole of public wharf and cargo handling area from the governments involved and handles such business as the storage and shipment of bulk cargoes. The large-scale harbor infrastructure components it operates include a 14-meter-deep berth. This enables us to use over-Panamax cargo vessels with a 90,000-tonne capacity, approximately double that of the bulk carriers we previously used.

Because of the large scale of each shipment of fuel, we are able to reduce procurement costs and thus further strengthen the international competitiveness of the Shunan Petrochemical Complex.

* The aim of the Waterfront Industrial Area is to enhance transportation efficiency for bulk and other cargo through strengthened cooperation between the wharf operated by private businesses and adjoining areas. The purpose of establishing the Waterfront Industrial Area Promotion Port, as designated by the Ministry of Land, Infrastructure, Transport and Tourism, is to augment the international competitiveness of Japan's local industrial sectors by establishing Waterfront Industrial Areas upon the application of port management bodies.

Tokuyama Corporation Purchasing & Logistics Department

Toward Stable Procurement

Teruyuki Sumiji
General Manager, Purchasing & Logistics Department

Our goals in purchasing activities are to ensure stable procurement and minimize procurement risk through fair and friendly partnerships with our suppliers. Not only a matter of delivery time, stable procurement includes reliability with regard to quality, compliance with the law and the maintenance of fair prices. Further, we constantly strive to achieve greater transparency, fairness and appropriateness with regard to our purchasing activities in the course of our daily business, all with the aim of accomplishing and surpassing our aforementioned goals.

As for overseas procurement that enables us to enjoy the benefits of yen appreciation, we recognize the importance of striking a balance between keeping costs low and controlling risk.

Having launched the full-scale operation of Shunan Bulk Terminal in spring 2012, we aim to strengthen Tokuyama's international competitiveness by reducing procurement costs.

View of the coal storage yard from the shipping facility

Location of Internationally Strategic Bulk Cargo Ports

The Waterfront Industrial Area Promotion Port and Internationally Strategic Bulk Cargo Port

Shunan Bulk Terminal holds a long-term rental contract for a public wharf in Tokuyama Kudamatsu Port, which was designated as the nation's first Waterfront Industrial Area Promotion Port in 2008, and has been proceeding with the development of the site.

In May 2011, the port was also designated as an "Internationally Strategic Bulk Cargo Port" by the Ministry of Land, Infrastructure, Transport and Tourism, along with Ube Port, which is situated in the same prefecture.

Shunan Bulk Terminal Co., Ltd.

We Strive to Please Cargo Owners

Yoshito Kawamura
President, Shunan Bulk Terminal Co., Ltd.

In managing this company, we would like to make cargo owners in the Seto Inland Sea feel the benefits of utilizing our services, so we are making efforts to reduce storage fees by increasing our annual handling capacity for bulk cargo from two million tonnes to more than three million tonnes as soon as possible. We believe that by doing so, we can strengthen the international competitiveness of the Shunan Petrochemical Complex and contribute to the local economy.

Outline of Shunan Bulk Terminal Co., Ltd.
Location: 8, Harumi-cho, Shunan-shi, Yamaguchi Prefecture, Japan
Capital: ¥150 million
Employees: 26 (as of March 31, 2012)
Shareholders: Tokuyama Corporation, Idemitsu Kosan Co., Ltd.,
Tokuyama Kairiku Unso K.K.,
Zeon Corporation and the Shunan City Government
Coal storage capacity: 1,000,000 tonnes (planned)
Cargo off-loading capacity: 30,000 tonnes per day (from cargo vessels); to be increased to 45,000 tonnes per day from April 2013
Shipment operation: 24 hours a day, using both trucks and ships
Others: Equipped with four foreign matter inspection devices

90,000-tonne bulk carrier

View of the carrier's deck from the wheelhouse

Offloading coal

Piling up coal for storage

Loading a domestic vessel for shipment

Taking temperature measurements of coal piles

Making Ongoing Contributions to Local Society through Small Acts

Saishokai* Volunteer Tour at Tono City

To support reconstruction in coastal areas of Iwate Prefecture which were heavily devastated by the Great East Japan Earthquake, the member companies of Saishokai supported volunteer activities in Tono City.

Five Tokuyama staff members participated, including one who has relatives directly affected by the earthquake and had previously engaged in similar activities twice. The participants began by taking a night bus to an accommodation facility for volunteers that was run by the NPO "Tono Magokoro Net."

On the first day, participants cleared debris in Akahama District, Otsuchi-cho, which was devastated by a massive tsunami and a huge fire following the earthquake. This district, where more than 1,300 residents were deemed dead or missing due to the earthquake, became well known as the place where a pleasure ship ran aground atop a guest house, footage of which was aired on the news day after day. On the second day, the volunteers headed to Kamaishi City in which two "miraculous schools," Unosumai elementary school and Kamaishi Higashi junior-high school, are located. The miracle was that although both these schools were situated in coastal areas gravely damaged by tsunami, all 570 students of the schools were evacuated safely.

We acknowledge that such volunteer activities that take place over only a few days and sometimes called "volunteer sightseeing" will never be as effective as the long-term activities undertaken by volunteers from all over the world. Nevertheless, we did our best to pay the utmost respect to the souls of those who died.

Saishokai volunteer tour held at Tono City

* Saishokai is a group of companies that was founded in 1953 in recognition of the virtues of Katsujiro Iwai, the founder of the Iwai industrial group, to deepen cooperation and friendly relationships among member companies. The group was named after a part of Mr. Iwai's Buddhist name, "Saisho-in." At present, the group consists of the following nine companies: Kansai Paint Co., Ltd.; Daicel Corporation; Toabo Corporation, Tokuyama Corporation; Nisshin Steel Co., Ltd.; Japan Bridge Corporation; NHK Spring Co., Ltd.; FUJIFILM Corporation; and Sojitz Corporation.

"Mochitsuki Zosan" Volunteers Held a Charity Bazaar for Reconstruction

In fiscal 2011, Mochitsuki Zosan, a group of volunteers from among Tokuyama's staff members, held a charity bazaar to support reconstruction from the Great East Japan Earthquake. It was impressive to know so many people have the kind heart to support those who were devastated. Mochitsuki Zosan was started 29 years ago. Through its activities, we gain a broader perspective, unavailable solely through work, on local community; some members have even found their own outlook on life transformed. Looking ahead, we will pass on this precious activity to younger generations and pursue volunteer activities deeply rooted in the local community.

Forest Volunteer Activities: The Meeting for Exchange among the City, the Forest and the Water

The 15th Meeting for Exchange among the City, the Forest and the Water, a project for creating a forest for water conservation, took place under the auspices of the Yamaguchi Prefectural Shunan Agriculture and Forestry Office at the municipal Fureai-no-Mori forest at Susuma, Shunan City.

Aimed at securing a stable supply of high-quality water by creating a forest serving as a green dam, which is among the multiple functions of forests, this volunteer program included the removal of weeds that impede the growth of trees, pruning, thinning, and the planting of broad leaf trees. Tokuyama has been proactively participating in this program since 1997. At the meeting held in 2011, some 247 participants, including 144 Tokuyama staff members, took part in the project and worked under the guidance of forestry instructors.

Forest volunteer activities, the Meeting for Exchange among the City, the Forest and the Water

"Mikage" Book Donation Program

Through this program, which marked its 35th anniversary in 2011, we have been donating book coupons to elementary and junior high schools in Shunan City.

The program title "Mikage" reflects two things: the Tokuyama Factory's address, at 1-1 Mikage-cho; and the Japanese term "Okage" (the Chinese characters for "Mikage" can also be pronounced as "Okage") meaning indebtedness and gratitude.

In 2011, Tokuyama donated ¥100,000 each to 47 schools. With this year's donations, the amount of donations to date, including book coupons and bookshelves, totaled ¥175.35 million.

Mr. Yamada, General Manager of the Tokuyama Factory, handed the Mayor of Shunan, Mr. Kimura, the list of contribution

'11 Kagawa Chemistry Show—The Exciting World of Chemistry

This annual chemistry show was held from August 26 to 28, 2011 at Tenmaya Department Store in Takamatsu City, Kagawa Prefecture.

Sponsored by the Chugoku/Shikoku Branch of the Chemical Society of Japan, the show was co-hosted by the Tokuyama Science Foundation. The 26 booths in the show held exhibits presented by Kagawa University, academic institutions and companies.

Tokuyama's booth demonstrated how to make fuel cells as well as *Karumerayaki* sugar cookies. Of the 4,000 children who visited the show over the three days, 1,200 took part in experiments at Tokuyama's booth. It was inspiring to see the serious expressions on their faces turned into smiles with their eyes brightening as the *Karumerayaki* sugar cookies swelled up and when fuel cells made the LEDs light up.

Tokuyama's booth at the Kagawa Chemistry Show, where children experienced *Karumerayaki*

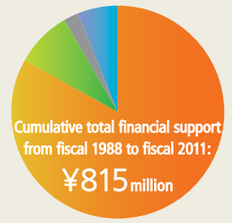
Tokuyama Science Foundation

The Tokuyama Science Foundation was established on September 19, 1988, to commemorate the 70th anniversary of Tokuyama's founding. This mission of the foundation is to offer financial support for research into new materials and related subjects in science and technology, and to raise awareness of science and technology, thereby enabling socioeconomic development and the improvement of people's lives.

The foundation has to date offered a cumulative total of ¥815 million for 710 projects. Many who enjoyed support from the foundation as youths are today leading professors at universities nationwide.

Invention club for boys and girls

All the recipients of research grants in fiscal 2010



Research grants: ¥679 million to 349 recipients

The foundation offers research grants to young researchers aged 45 or younger at universities and research institutions in Japan. After the financial support period, a research presentation meeting takes place with the participation of all recipients.

Financial support for international exchange: ¥69 million to 260 recipients

The foundation subsidizes the participation of young researchers aged 45 or younger at universities and research institutions in Japan at overseas meetings. After returning to Japan, the recipients are required to submit reports on the results.

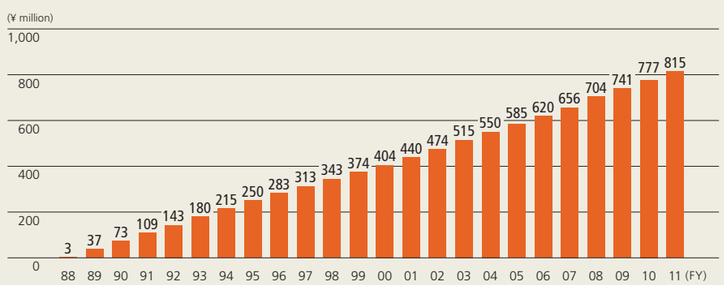
Financial support for international symposia: ¥19 million to 42 projects

The foundation provides financial support for the operations of international conferences to enable researchers to exchange information with peers overseas.

Grants for campaigns on science and technology: ¥48 million to 59 projects

The foundation backs campaigns that present the excitement and wonders of science and technology to children. The Chugoku/Shikoku Branch of the Chemical Society of Japan plays a central role in organizing a series of exhibitions titled "An Exciting World of Chemistry" in the summer vacation season. In Yamaguchi Prefecture, there are "invention clubs" for boys and girls operating in seven cities, towns and villages.

Cumulative Total of Grants and Financial Support



Promoting Environmental Management

Tokuyama's Environmental Management:

Performance for Fiscal 2011

Protecting the Global Environment

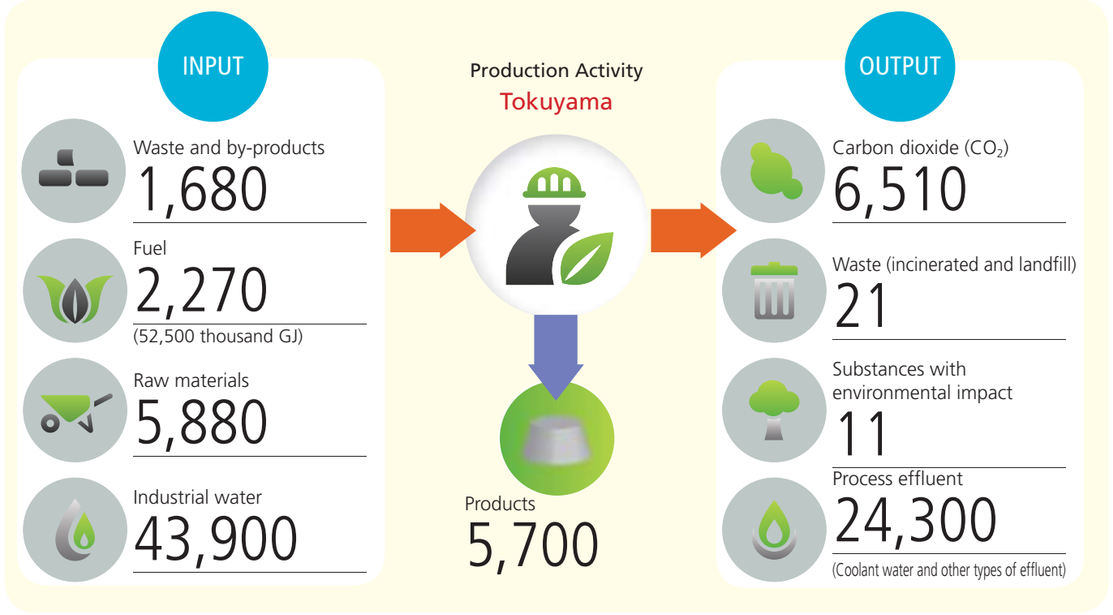
One of our most important corporate social responsibilities is to actively protect the global environment. Tokuyama practices environmental management with an emphasis on environmental perspectives in all of its business activities.

Tokuyama's Environmental Performance for Fiscal 2011

Tokuyama strives to obtain accurate data on the input and output of materials and substances in its business activities and reduce the environmental impact of these activities to meet its environmental targets.

Flow of Materials in Business Activities

(Unit: 1,000 metric tons)



Fiscal 2011 Results of Environmental Preservation Activities (Tokuyama Factory)

Rating: ○: Satisfied; ×: Not satisfied

Category	Items		Fiscal 2011 Target	Fiscal 2011 Result	Rating	Fiscal 2012 Target
Environmental Impact Reduction	Atmosphere	Soot and Dust (Compared to the average emission from fiscal 2008 to 2010)	±0%	27%	×	±0%
	Water Quality	COD (Compared to the fiscal 2010)	±0%	−5%	○	±0%
		Nitrogen (Compared to the fiscal 2010)	±0%	−2%	○	±0%
		Phosphorus (Compared to the average emission from fiscal 2008 to 2010)	±0%	−7%	○	±0%
	PRTR	PRTR (Compared to the average emission from fiscal 2008 to 2010)	±0%	−5%	○	±0%
	Energy Conservation	Unit Energy Consumption Index (Compared to the fiscal 1990)	—*	24% lower than the fiscal 1990 level	○	24% lower than the fiscal 1990 level
Global Environment Conservation	Recycling	Rate of Effective Waste Utilization	Maintain at 94%	94%	○	Maintain at 94%
Waste Reduction	Zero Emission	Zero-Emission Rate	Maintain at 99.9%	99.9%	○	Maintain at 99.9%

In fiscal 2011, Tokuyama satisfied its targets for water pollutant reductions, PRTR, energy conservation, recycling and zero emissions.

* Tokuyama did not set an energy conservation target for fiscal 2011. The Company has set the target for fiscal 2012 at "24% lower than the fiscal 1990 level."

Environmental Accounting

To accurately grasp and analyze the amounts of investments and costs associated with environmental preservation activities and improve the effectiveness of environmental investment, Tokuyama has implemented environmental accounting since fiscal 2000.

Environmental Costs

Of Tokuyama's total environmental investment during fiscal 2011, investments relating to pollution control and global environmental conservation activities accounted for 76% and 12%, respectively. At the same time, investments relating to social activities and management activities accounted for a few percent each. Costs relating to pollution control, resource recycling and global environmental conservation accounted for 67%, 15% and 11%, respectively, of the Company's total environmental costs for the same period.

Environmental Preservation Costs

Category		Major Activities	Amount Invested (¥ million)	Costs (¥ million)
Costs in the Business Areas	Pollution Control	Installation of new neutralizing facilities, replacement of existing neutralizing facilities	438	4,709
	Global Environmental Conservation	Replacement of existing facilities for the treatment and stabilization of industrial waste	71	771
	Resource Recycling	Effective use of resources	1	1,091
Upstream and Downstream Costs			0	2
Management Activity Costs		Environmental analysis equipment, etc.	36	273
Research and Development Costs			0	0
Social Activity Costs		Greenery development, production of CSR report	33	67
Costs for Environmental Damage		Imposition, management of a former mining site	1	156
Total			580	7,071

Major environmental investments in fiscal 2011 included the installation of new neutralizing facilities, the replacement of existing neutralizing facilities and the replacement of existing facilities for the treatment and stabilization of waste.

Economic Benefits

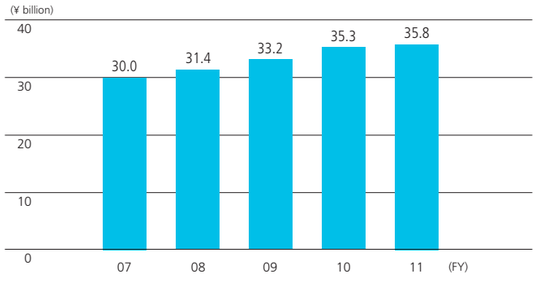
To analyze the economic benefits, we calculate nothing but the real benefits of gains on reduction in energy consumption, gains on sale of valuable waste, gains on reduction in waste disposal costs through waste recycling, and gains on reduction in raw material and fuel costs through waste recycling. Thus, Tokuyama does not calculate de facto economic benefits based on estimates whatsoever.

In fiscal 2011, Tokuyama achieved economic benefits totaling approximately ¥1.7 billion, up about ¥260 million from fiscal 2010.

Economic Benefits in Fiscal 2011

Category	Material Benefit (1,000 metric tons)	Economic Benefits (¥ million)
Gains on Reduction in Energy Consumption		189
Gains on Sale of Valuable Waste	85	322
Gains on Reduction in Waste Disposal Costs through Waste Recycling	266	688
Gains on Reduction in Raw Material and Fuel Costs through Waste Recycling	267	482
Total		1,681

Cumulative Total Environmental Investments (since fiscal 1990)



Commitment to the Prevention of Global Warming

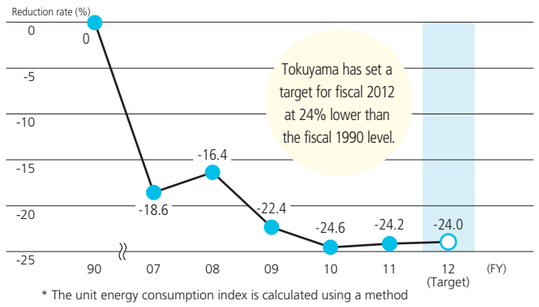
Prevention of global warming is key to the future of the human race. Tokuyama is making steady energy conservation achievements in its business activities while supporting energy conservation in employee households.

Promotion of Energy Conservation

Tokuyama consumes a huge amount of energy in manufacturing its core products, such as caustic soda, cement and polycrystalline silicon. Carbon dioxide, one of the greenhouse gases, is generated chiefly by burning fossil fuels and also by the decarboxylation of limestone used as a raw material in cement production.

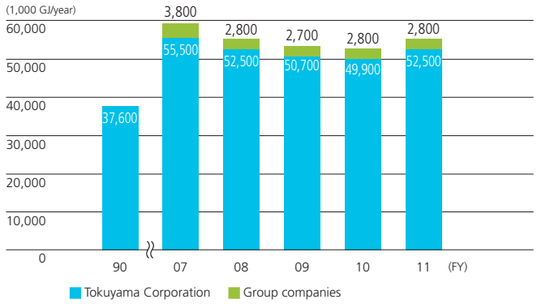
Aware of the high priority of preventing global warming, the Company is conducting energy conservation activities to reduce carbon dioxide emissions. The Tokuyama Factory is responsible for more than 99% of the Company's energy consumption. Although our energy consumption volume at the Tokuyama Factory grew year on year in fiscal 2011 due to increased production, we have promoted the switchover from coal to alternative fuels as well as the acceleration of energy saving activities. As a result, the Tokuyama Factory has managed to keep the unit energy consumption index (with unit energy consumption in fiscal 1990 set as 0) at -24.2%, a level virtually unchanged from the previous fiscal year.

Unit Energy Consumption Index* (Tokuyama Factory)



* The unit energy consumption index is calculated using a method recommended by the Japan Chemical Industry Association (JCIA).

Energy Consumption



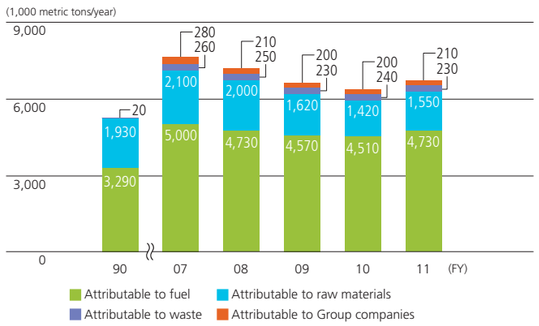
Efforts at Our Offices

In fiscal 2011, due to the effects of the Great East Japan Earthquake, limits on electricity use were imposed on business operators in accordance with the Electricity Business Act. These limits included a requirement for small-scale operators to engage in voluntary energy-saving activities to reduce peak electricity consumption by 15% in summer 2011. In response, we again implemented the Cool Biz campaign, in which we have been taking part every year, at our Tokyo Head Offices in Shibuya and Shimbashi from May 2011, which was earlier in the year than usual.

Moreover, thermo-hygrometers that also display the heat stress index as well as electric fans were installed on every floor of the offices. Utilizing this equipment, we were able to carefully control the air-conditioner temperature settings. We also removed some lighting at the offices and changed the settings of all the PCs used in the offices to energy saving mode. As for laptop PCs, we used only battery power during the day, aiming to cut energy use at the peak consumption time. As a result, we have succeeded in reducing energy consumption by more than 15% on a year-on-year basis in June and July 2011.

Prior to relocating and integrating our Tokyo Head Offices in August 2011 to our new office in Kasumigaseki Common Gate West Tower, which was designed with due consideration given to the environment, we removed some of the lighting. Also, we continued to strictly control air-conditioner temperature settings after the relocation. Thanks to these continuing efforts, we have succeeded in reducing the entire building's energy consumption by more than 15% on a year-on-year basis.

CO_2 Emissions



Contributing to Global Warming Prevention Efforts in the Consumer Sector

Through the provision of Shanon®—a plastic window sash that supports energy conservation in residential houses—and other products, the Tokuyama Group has been helping to reduce CO_2 emissions in the consumer sector, where CO_2 emissions have significantly increased. We focus our efforts on the development of technologies that contribute to the prevention of global warming through such initiatives as the development of a new production method for polycrystalline silicon for solar cells, the development of electrolyte membranes for fuel cells and so forth.

Global Warming Prevention Support Program

In April 2008, Tokuyama set up this program to encourage Tokuyama Group employees to take action aimed at helping prevent global warming, as part of its environmental, energy-saving and social contribution activities from the standpoint of CSR promotion. Through the program, the Company covers part of the costs incurred by employees purchasing and installing specific eco-friendly products closely related to the Group's business, namely the plastic window sash for residential use and the solar power generation system. Its objective is to help reduce CO_2 emissions in the household sector by raising Group employees' awareness of global warming and encouraging them to save energy.

The table below shows the status of use of the program by Group employees in the past four years.

Status of Use of the Global Warming Prevention Support Program

	Plastic Window Sashes		Solar Power Generation Systems	
	Number of Cases of Subsidization	(Units)	Number of Cases of Subsidization	(kW)
Fiscal 2008	12	177	6	24.01
Fiscal 2009	7	141	8	33.35
Fiscal 2010	7	91	30	129.41
Fiscal 2011	13	174	22	87.04
Total	39	583	66	273.81

During fiscal 2011, despite the economic stagnation following the Great East Japan Earthquake, the program has been continuously utilized as before. We assume this reflects deep rooted awareness, even for private households, of the need for global warming prevention. We post data and status updates on the utilization of the program on the Group's intranet site, which also introduces external websites providing additional information on global warming prevention for the enlightenment of employees.

Intranet site dedicated for the program

Reduction of Air and Water Pollutants

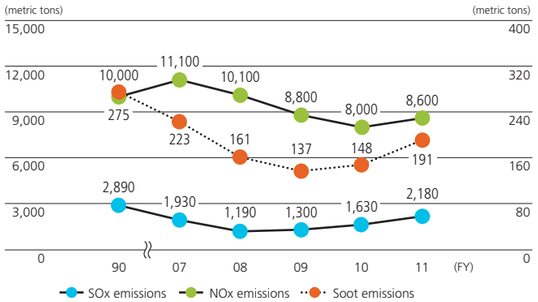
Actively seeking to protect the environment, Tokuyama has a long record of initiatives to reduce environmental pollutants released into the atmosphere and into water environments.

Air Pollutant Emissions

We have equipped our boilers, cement kilns and other sources of air pollutants with such emission control systems as flue gas desulfurizers, denitration equipment, low NOx burners and high-performance dust collectors in an attempt to reduce sulfur oxides (SOx), nitrogen oxides (NOx) and soot emissions.

In fiscal 2011, SOx, NOx and soot emissions increased year on year in line with an increase in facility utilization.

SOx, NOx and Soot Emissions

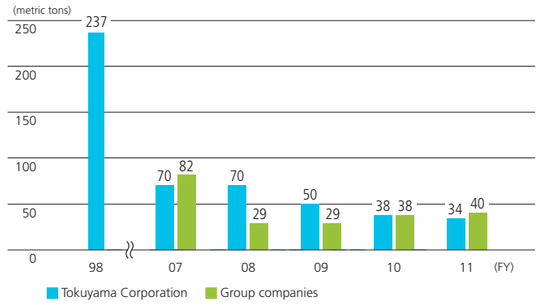


PRTR*1 Substance Emissions

Twenty-six substances among those handled by Tokuyama in fiscal 2011 are subject to notification under the Pollutant Release and Transfer Register (PRTR) legislation. In fiscal 2011, the Company continued to promote Companywide efforts to reduce the emission of PRTR substances. As a result, Tokuyama Corporation's total PRTR substance emissions (non-consolidated basis) decreased by about 4 metric tons year on year to 34 metric tons.

*1 The pollutant release and transfer register (PRTR) refers to a system of collecting and publishing data on the sources of hazardous substances, the amounts of such substances emitted into the environment or carried away from business sites in the form in which they are contained in waste.

PRTR Substance Emissions



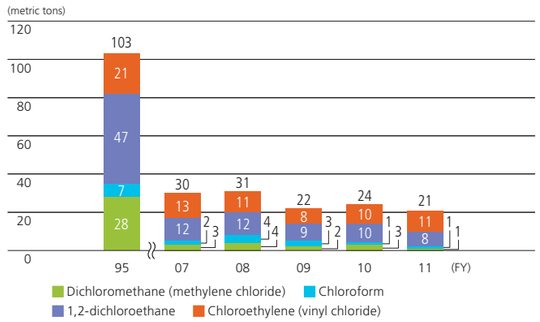
Countermeasures against Dioxin

Waste oil incinerators and part of vinyl chloride monomer manufacturing facilities are subject to regulations under the Special Measures Law for Countermeasures against Dioxins. Tokuyama measures dioxin concentrations in flue gas and wastewater, and the figures remain far below the control levels.

Hazardous Air Pollutant Emissions

Tokuyama sets out a voluntary reduction plan for four substances that it produces, including chloroethylene, among the 12 substances subject to voluntary control in accordance with the Air Pollution Control Law. In accordance with the plan, the Company consistently implements measures to reduce the emission of these substances.

Hazardous Air Pollutant Emissions



Industrial Effluent and Water Pollutant Emissions

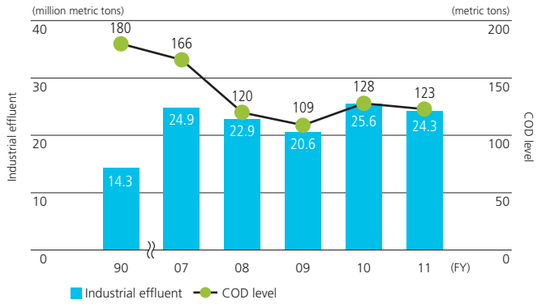
To meet the statutory limits as well as the limits agreed with local governments, the Tokuyama Factory has set tighter voluntary limits to carry out stringent control through pollutant monitoring and purification using wastewater treatment equipment.

The levels of COD,*2 nitrogen and phosphorus are subject to regulation in terms of total emissions in relation to water quality. To ensure compliance with indicators for these three items, Tokuyama is working to reduce the levels of their emissions through the use of activated sludge treatment facilities and other equipment.

In fiscal 2011, the COD level and nitrogen emissions decreased slightly year on year. In contrast, phosphorus emissions increased year on year.

*2 Chemical oxygen demand is an indicator used to measure water quality and refers to the amount of oxygen required to oxidize organic compounds in water.

Industrial Effluent and COD Level



Nitrogen and Phosphorus Emissions

(metric tons)

	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011
Nitrogen	112	108	140	110	108
Phosphorus	4.5	2.9	3.6	2.3	2.8

Reducing Waste and Promoting Recycling

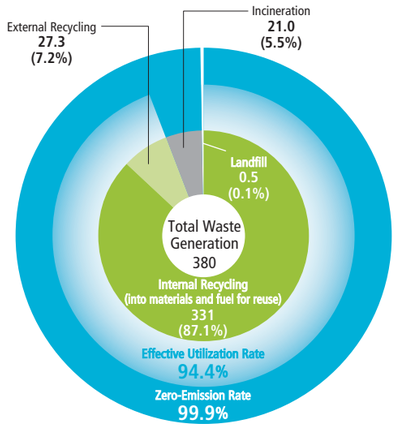
As a result of its exhaustive efforts to reduce and recycle waste, Tokuyama maintained the effective waste utilization rate at 94% and the zero-emission rate at 99.9% in fiscal 2011.

Waste Management

In fiscal 2011, Tokuyama generated 380 thousand metric tons of waste. The Company actively recycled this waste internally and externally, mainly reusing it as raw materials and fuel for cement production at the Tokuyama Factory. Packing materials, pallets and other wood waste were crushed into woodchips so that they could be effectively used as fuel at power plants. As we worked diligently to recycle waste into raw materials for cement, we maintained our effective waste utilization rate at 94%. We stepped up our activities for reusing and reducing waste and, accordingly, maintained our high landfill zero-emission rate at 99.9%.

Breakdown of Industrial Waste by Treatment for Fiscal 2011

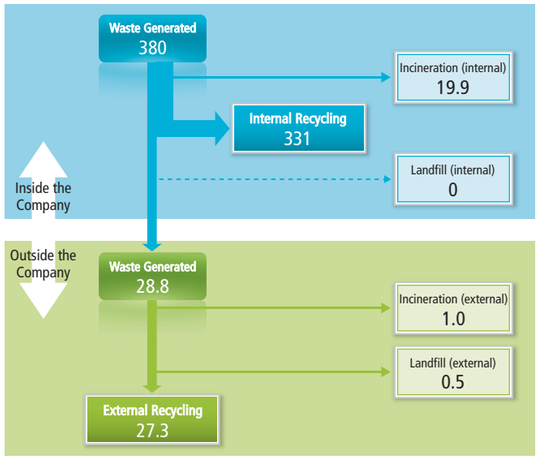
(Unit: 1,000 metric tons)



$$\text{Effective Utilization Rate (\%)} = \frac{\text{Recycling Volume (internal and external)}}{\text{Total Waste Generation}} \times 100$$

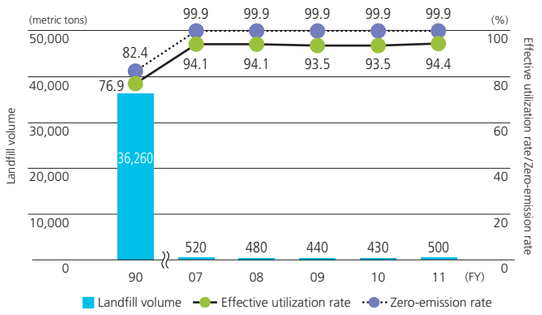
$$\text{Zero-Emission Rate (\%)} = \left[1 - \frac{\text{Landfill Volume (internal and external)}}{\text{Total Waste Generation}}\right] \times 100$$

Flow of Industrial Waste Treatment



* Figures are for fiscal 2011 and in the unit of 1,000 metric tons.

Landfill Volume, Zero-Emission Rate and Effective Utilization Rate



Management and Treatment of PCB Waste

The Tokuyama Group has 79 transformers and capacitors containing polychlorinated biphenyl (PCB).*1 The Group has already stopped using them. In compliance with the Special Measures Law for the Proper Treatment of Polychlorinated Biphenyl Waste, they are retained and managed in an appropriate manner. Legislation requires all PCB waste to have been treated by July 2016. In accordance with the plan of the Japanese government, wide-area PCB treatment facilities are being constructed at various locations in Japan, and some of these facilities have started operation. Taking advantage of the early registration program, the Tokuyama Group finished its registration to Japan Environmental Safety Corporation (JESCO) in December 2005 and commenced the treatment in fiscal 2009. In the future, we will properly treat our PCB waste in line with the timetables of the wide-area treatment project in separate districts.

*1 PCB is an organic chlorinated compound that emits dioxins when burnt at a low temperature. Chemically stable and excelling in thermal resistance, chemical resistance, insulation and other electric characteristics, it was formerly used in many different electric products including transformers and capacitors. However, it has been banned from production or utilization since 1972 because of its hazardousness to humans. Transformers, capacitors and other PCB-containing products that have already been distributed have to be retained at business establishments.

Tetsushi Yamada
General Manager of the Tokuyama Factory

Tokuyama Factory

Location: 1-1, Mikage-cho, Shunan-shi, Yamaguchi Prefecture, Japan

Employees: 1,699

Factory Area: 1,910,000 square meters (total area)

Main Products: Cement, inorganic and organic chemical products, polycrystalline silicon, fumed silica, vinyl chloride monomer and others

Performance Data

	Unit	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011
SOx Emissions	Metric tons	1,930	1,190	1,300	1,630	2,180
NOx Emissions	Metric tons	11,100	10,100	8,800	8,000	8,600
Soot Emissions	Metric tons	223	161	137	148	191
Industrial Water Consumption	Million metric tons	41.1	40.6	41.8	40.5	43.8
Effluent	Million metric tons	24.8	22.8	20.5	25.5	24.2
COD Level	Metric tons	161	116	107	124	119
Total Nitrogen Emissions	Metric tons	112	108	140	110	108
Total Phosphorus Emissions	Metric tons	4.5	2.9	3.6	2.3	2.8
PRTR Substance Emissions	Metric tons	67	66	48	37	32
Waste Generated	Thousand metric tons	363	344	300	312	379
Final Waste Disposal Volume	Metric tons	480	460	420	417	490
Energy Consumption*	Thousand GJ	55,400	52,400	50,600	49,800	52,400
CO_2 Emissions (attributable to fossil fuel)*	Thousand metric tons	5,000	4,730	4,570	4,500	4,730
Complaints	Complaints	6	0	1	5	3

* The calorific power and other figures have been recalculated retrospectively to 1990, following the amendment of the Act on the Rational Use of Energy.

Emissions and Transfer of PRTR Substances in Fiscal 2011

Unit: metric tons (mg-TEQ for dioxins)

Substance	Government Ordinance Number	Emissions				Amount Transferred
		To Air	To Water	To Soil	Subtotal	
Chloroethylene (vinyl chloride)	94	10.8	0.0	0.0	10.8	0.0
1,2-Dichloroethane	157	7.9	0.0	0.0	7.9	1.2
Cresol	86	0.0	4.9	0.0	4.9	0.0
Toluene	300	3.0	0.0	0.0	3.0	48.4
Water-soluble zinc compounds	1	0.0	2.3	0.0	2.3	0.0
Chloromethane (methyl chloride)	128	1.4	0.0	0.0	1.4	0.0
Dichloromethane (methylene chloride)	186	0.8	0.0	0.0	0.8	0.0
Chloroform	127	0.5	0.0	0.0	0.5	0.0
1,2-Epoxypropane (propylene oxide)	68	0.4	0.0	0.0	0.4	2.4
1,2-Dichloropropane	178	0.4	0.0	0.0	0.4	191.9
2,2'-Azobisisobutyronitrile	16	0.0	0.0	0.0	0.0	0.0
Carbon tetrachloride	149	0.0	0.0	0.0	0.0	0.0
Hydroterphenyl	238	0.0	0.0	0.0	0.0	0.0
Nickel compounds	309	0.0	0.0	0.0	0.0	0.0
Hydrazine	333	0.0	0.0	0.0	0.0	0.0
Hydrogen fluoride and its water-soluble salt	374	0.0	0.0	0.0	0.0	0.0
Benzene	400	0.0	0.0	0.0	0.0	0.0
Boron compounds	405	0.0	0.0	0.0	0.0	0.0
(Dioxins)	243	18.4	1.6	0.0	20.0	0.0
Total (excluding dioxins)		25.2	7.2	0.0	32.4	244.0

Substances are listed in descending order of emissions and, for substances with no emissions, in order of government ordinance number., Emissions to water indicate the release into public waters., Amount transferred indicates the sum of the quantity transferred to sewerage and the quantity subject to intermediate treatment., Total figures are rounded to the first decimal place.

Fumiaki Iwasaki
General Manager of the Kashima Factory

Kashima Factory

Location: 26, Sunayama, Kamisu-shi, Ibaraki Prefecture, Japan

Employees: 75

Factory Area: 101,000 square meters

Main Products: Tokuyama Corporation's Kashima Factory
Pharmaceutical bulks (X-ray contrast agents, stomach and duodenal ulcer treatment drugs); optical materials (plastic lens monomer, light modulating materials, hard coating solutions); materials for electronic materials and metal washing solutions

Main Products: Tokuyama Dental Corporation's Kashima Factory
Dental materials (restorative materials, adhesives, denture relining materials, impression materials and investing materials)

At the Kashima Factory, we have positioned the appropriate management of chemical substance handling as its most important issue and have simultaneously promoted waste recycling. As a result, in fiscal 2011 we achieved an effective waste utilization rate of 81%, second only to the rate of 82% achieved in fiscal 2009. Looking ahead, we will actively seek ways to realize material and thermal recycling for more categories of waste with the aim of further improving our effective utilization rate for all the waste we generate.

In addition, our final landfill volume decreased to a record-low seven metric tons. Also, the zero-emission rate at our factory exceeded 99% in fiscal 2011.

Tokuyama Dental Corporation has changed the materials of some products from dichloromethane to water-based materials, as part of efforts to reduce dichloromethane emissions into the atmosphere. Consequently, the emission volume was more than halved compared with the previous fiscal year.

Performance Data

	Unit	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011
Industrial Water Consumption	Thousand metric tons	107	78	44	77	71
Effluent	Thousand metric tons	129	95	58	93	90
COD Level	Metric tons	5	4	2	4	4
PRTR Substance Emissions	Metric tons	4	5	4	2	2
Waste Generated	Metric tons	965	770	560	857	909
Final Waste Disposal Volume	Metric tons	32	27	11	12	7
Energy Consumption	Thousand GJ	58	55	53	60	57
CO_2 Emissions (attributable to fossil fuel)	Metric tons	2,320	2,230	2,110	2,340	2,324
Complaints	Complaints	0	0	0	0	0

Emissions and Transfer of PRTR Substances in Fiscal 2011

Unit: metric tons

Substance	Government Ordinance Number	Emissions				Amount Transferred
		To Air	To Water	To Soil	Subtotal	
Toluene	300	0.7	0.1	0.0	0.8	66.8
Chloroform	127	0.4	0.3	0.0	0.7	1.2
Dichloromethane (methylene chloride)	186	0.3	0.0	0.0	0.3	18.5
Acetonitrile	13	0.0	0.0	0.0	0.0	1.1
1,4-Dioxane	150	0.0	0.0	0.0	0.0	0.0
N,N-Dimethylacetamide	213	0.0	0.0	0.0	0.0	2.2
N,N-Dimethylformamide	232	0.0	0.0	0.0	0.0	19.7
Triethylamine	277	0.0	0.0	0.0	0.0	3.6
2-Vinylpyridine	338	0.0	0.0	0.0	0.0	0.2
2,3-Epoxypropyl Methacrylate	417	0.0	0.0	0.0	0.0	0.0
Alpha-Methylstylene	436	0.0	0.0	0.0	0.0	0.0
Total		1.3	0.5	0.0	1.8	113.3

Substances are listed in descending order of emissions and, for substances with no emissions, in order of government ordinance number., Emissions to water indicate the release into public waters., Amount transferred indicates the sum of the quantity transferred to sewerage and the quantity subject to intermediate treatment., Total figures are rounded to the first decimal place.

Activities of Group Companies

Tokuyama understands that RC activities should be conducted on a Groupwide basis. To support their activities, the Company has signed RC management agreements with Tokuyama Group companies, both inside and outside Japan, that are engaging in production activities.

We collect data on the environmental impact of Group companies and their safety management indicators and conduct safety, environmental and quality audits at the rate of several Group companies per year. By means of these actions, we monitor and enforce RC activities conducted at individual Group companies. Also, changes and other movements in statutory regulations and other information are shared with our Group companies.

In addition, we provide Group companies with assistance in acquiring ISO 9001 and ISO 14001 certification.

Status of ISO 9001 and ISO 14001 Certification

Group Company	ISO 9001	ISO 14001
Sun•Tox Co., Ltd.	●	●
Excel Shanon Corporation	●	—
Tohoku Shanon Co., Ltd.	●	●
A&T Corporation	●	●
Figaro Engineering Inc.	●	●
Tokuyama Dental Corporation	—*	●
Tokuyama Siltech Co., Ltd.	●	●
Sun Arrow Chemical Co., Ltd.	—	●
ASTOM Corporation	●	●
Shin Dai-ichi Vinyl Corporation	—	●
Tokuyama Polypropylene Co., Ltd.	●	●

●=Certified ●=Included in certified sites
*Certified under ISO 13485

Sun•Tox Co., Ltd.

Established: February 14, 1992
Ownership: Tokuyama Corporation (100%)
Head Office: Tokuyama Bldg., 1-4-5, Nishi Shimbashi, Minato-ku, Tokyo, Japan
Business: Manufacture and sale of biaxial-oriented polypropylene films and cast polypropylene films

Kanto Plant

Location: 3075-18, Shimasu, Itako-shi, Ibaraki Prefecture, Japan
Employees: 191 Site Area: 55,800 square meters

Toshiyuki Yamaoka
Plant Manager

Located in the Itako Industrial Park in Ibaraki Prefecture, the Kanto Plant produces 25,000 metric tons of biaxial-oriented and cast polypropylene films per year. As a Type I Energy Management Designated Facility, it has been taking steps to ensure effective energy utilization by introducing in-house power generation facilities and energy-efficient facilities, among other initiatives.

In summer 2012, an electric power shortage was predicted in the Kanto region just as the last year. In response, we again strove to support a stable electricity supply in the Kanto region by heightening the ratio of in-house power generation and promoting energy saving efforts.

We have obtained certification for three management systems covering occupational safety and health (OSHMS), the environment (ISO 14001) and quality (ISO 9001). To make steady improvements throughout the plant, we are continuously enhancing these three systems.

We are also striving to create a plant that harmoniously coexists with local communities. Nominating the thirtieth day of each calendar month as No-Garbage Day, we are engaging in cleaning activities in the neighboring areas.

Performance Data

	Unit	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011
Waste Generated	Metric tons	60	34	43	56	57
Final Waste Disposal Volume	Metric tons	29	5	16	38	43
Energy Consumption	Thousand GJ	310	327	334	344	341
CO_2 Emissions	Thousand metric tons	17	18	18	19	19
SOx Emissions	Metric tons	0.4	0.4	0.3	0.3	0.4
NOx Emissions	Metric tons	0.7	0.7	0.5	0.6	0.7
Soot Emissions	Metric tons	0.04	0.08	0.05	0.04	0.04

Tokuyama Plant

Location: 7-7, Harumi-cho, Shunan-shi, Yamaguchi Prefecture, Japan
Employees: 134 Site Area: 24,100 square meters

Koji Tanaka
Plant Manager

Located on the premises of the Higashi Plant in Tokuyama Corporation's Tokuyama Factory, the Tokuyama Plant produces 22,000 metric tons of biaxial-oriented polypropylene films, which are mainly used for food wrapping, per year. In environmental aspects, we work together with Tokuyama Corporation's Tokuyama Factory to address environmental conservation and to carry out ISO 14001 activities. The Tokuyama Plant is continuing with its positive efforts to slash production losses, and through such efforts we have more than halved our waste generation. Also, we are promoting activities to recycle all waste film materials.

We obtained certification for the Occupational Safety and Health Management System (OSHMS) in February 2008. Since fiscal 2009, no disasters causing absence from work occurred at our plant although in fiscal 2011, three minor accidents were recorded.

Going forward, we will continue to promote safety and health activities centered on risk assessment, and enhance such activities through a PDCA cycle. Under the slogan of "Take pleasure in production, be stringent with quality and adhere to safety," we are aiming to create a plant that deserves lasting trust of society, the customers and employees.

Performance Data

	Unit	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011
Waste Generated	Metric tons	200	120	90	80	70
Final Waste Disposal Volume	Metric tons	11	20	6	9	1
Energy Consumption	Thousand GJ	463	413	414	434	448
CO_2 Emissions	Thousand metric tons	27	24	25	26	26
PRTR Substance Emissions	Metric tons	—	—	0.1	0.1	0.0
Complaints	Complaints	0	0	0	0	0

Sun Arrow Chemical Co., Ltd.

Established: February 1, 1999
Ownership: Tokuyama Corporation (100%)
Head Office: Nakanoshima Central Tower, 2-2-7, Nakanoshima, Kita-ku, Osaka, Japan
Business: Manufacture and sale of polyvinyl chloride compounds

Tokuyama Plant

Location: 1-2, Harumi-cho, Shunan-shi, Yamaguchi Prefecture, Japan
Employees: 24 Site Area: 3,280 square meters

Yasuto Yasuzawa
Plant Manager

Located on the premises of the Higashi Plant in Tokuyama Corporation's Tokuyama Factory, our Tokuyama Plant manufactures pipes and joints, which are essential in developing infrastructure, in addition to polyvinyl chloride compounds, which are used in such products as plastic window sashes to attain excellent energy conservation effects. While it is common practice to add lead-based stabilizer to polyvinyl chloride compounds, we continued our efforts to develop a lead-free formula in fiscal 2011, as we did in fiscal 2010, in response to the requests of users.

To protect the environment, we have been promoting the ISO 14001 management system. In particular, we have pursued the theme of "reducing the volume of substances with environmental impact" in accordance with the Tokuyama Corporation's Environment Management Program. Product development activities based on this theme are gradually bringing results.

With respect to safety, health, security and disaster prevention, we proactively carried out full-participation Five-S activities, Hiyari Hatto accident prevention activities, Kiken Yochi hazard prediction training and activities to maintain a trouble-free status. As a result of these activities, we have successfully maintained our zero-accident and zero-disaster record since the company's establishment.

Looking ahead, we will continue to operate the plant in fiscal 2012 with a commitment to environmental conservation, safety and security, thoroughly implementing internal control as a member of the Tokuyama Group.

Performance Data

	Unit	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011
Power Consumption	Thousand kWh	3,470	2,810	2,662	2,735	2,763
Waste Plastics Generated	Metric tons	158	157	119	124	110
Waste Plastics Effectively Used	Metric tons	158	157	119	124	110
Final Waste Disposal Volume (external)	Metric tons	0.0	0.6	3.8	12.5	10
Steam Consumption	Metric tons	240	240	240	240	240
Industrial Water Consumption	Thousand metric tons	65	65	65	65	65

Tokuyama Polypropylene Co., Ltd.

Established: April 2, 2001
Ownership: Tokuyama Corporation (50%) and Prime Polymer Co., Ltd. (50%)
Head Office: 1-1, Harumi-cho, Shunan-shi, Yamaguchi Prefecture, Japan
Business: Manufacture and sale of polypropylene resin and soft polyolefin resin

Tokuyama Plant

Location: 1-1, Harumi-cho, Shunan-shi, Yamaguchi Prefecture, Japan
Employees: 65 Site Area: 70,997 square meters

Hiroaki Endo
Plant Manager

Our Tokuyama Plant is located on the premises of the Higashi Plant, which constitutes part of the Tokuyama Factory of Tokuyama Corporation. The plant manufactures and sells 200,000 metric tons of polypropylene resins and 7,000 metric tons of soft polyolefin resins each year. This plant runs three systems for safety management, environmental management, and quality management and undertakes RC activities in tandem with the Tokuyama Factory.

With respect to safety management, we perform risk assessments of processes, facilities, and work. We are also promoting Companywide Hiyari Hatto Kigakari (HHK) accident prevention and hazard identification activities to eradicate accidents, disasters and risks. As a result of these efforts, we succeeded in maintaining the zero-accident and zero-disaster status that we have enjoyed for 37 years, since the days when we operated as Tokuyama Corporation's Polypropylene Manufacturing Department.

In fiscal 2010, we renewed five-year accreditation for safety inspection as defined under the High Pressure Gas Safety Act. In the same year, we acquired a two-year renewal and a new four-year accreditation for open boiler inspections defined under the Industrial Safety and Health Act. Building on these accreditations, we are further promoting voluntary safety initiatives.

In accordance with a biennial schedule, fiscal 2012 is a year of the plant's periodic maintenance. Using this opportunity as a springboard, we will step up RC activities in a bid to maintain our zero-accident and zero-disaster record, to reduce our environmental footprint, and to eliminate all customer quality complaints.

Performance Data

	Unit	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011
Industrial Water Consumption	Thousand metric tons	417	322	354	329	366
Waste Generated	Metric tons	141	159	134	180	123
Final Waste Disposal Volume	Metric tons	4	18*	6.5	3.8*	0
Unit Energy Consumption Index (Fiscal 2002 = 100)	%	85	98	97	86	88

* Year with periodic maintenance

Tokuyama Group Code of Conduct

All Tokuyama Group members will commit to operating in a way that is compatible with society and to fulfilling the Group's corporate social responsibility, following the principles below and endeavoring to achieve sustained growth by earning the support of our clients.

1. Compliance
We act with good corporate ethics and common sense, based on the understanding that compliance with laws and corporate rules is the most important requirement in pursuing any kind of business.

2. Fair Business Activities
- We aim to be moderate and reasonable in our business through fair, free, and transparent competition.
- We will maintain fair and reasonable relations with political and governmental organizations.

3. Responsible Care
- We develop, produce and supply products and services that have value to the community, with a constant focus on safety requirements, so that we can satisfy our clients and consumers and earn their trust.
- We voluntarily and proactively address environmental issues based on an understanding of their significance to all humanity and their importance to the continuation of business activities.

4. Respect for Human Rights and Personality
- We respect the basic rights of people in our business and will not discriminate on the base of race, gender, creed, nationality or religion.
- We value diversity in the workplace and will provide a safe and comfortable working atmosphere to provide satisfaction and opportunity to each employee.

5. Communications
We make fair and positive public disclosure of information about our Group, including its business activities and financial reports, to maintain good communication with society.

6. Social Contributions
- We actively seek to contribute to our community as a good corporate citizen.
- We contribute to the development of local regions in our international business activities, respecting not only international rules, local laws and regulations, but also local cultures and customs.

7. Exclusion of Antisocial Forces
We will not enter into any business arrangement with antisocial forces that threaten public order and safety.

(Established on May 12, 2009)

Tokuyama Group Guidelines for Business Activities

Preface

These Guidelines set out the essential principles that govern the ongoing business activities of the Tokuyama Group (hereinafter referred to as the "Group"), which aims to realize a sustainable future in tandem with society and to gain the trust and appreciation of individual stakeholders.

Ⅰ. Basic Principle

The Group will not only comply with laws, regulations and its corporate rules, but also adhere to strict corporate ethics and conduct its business activities with decency.

Ⅱ. Relationship with Society

1. Contribution to Society

(1) While perceiving the needs of consumers and customers, the Group will develop and provide products and services that have value to society with the aim of contributing to sustainable social development.
(2) As it responds to the globalization of business operations, the Group will respect local cultures and customs as well as the interests of the local stakeholders while complying with international and local rules, laws and regulations. In doing so, the Group will contribute to regional development in the course of its international business activities.
(3) Each company of the Group will actively seek to engage in social contribution activities as a good corporate citizen.

2. Environmental Conservation and Protection

(1) The Group will voluntarily address environmental issues based on a recognition of their significance to all humanity and their vital importance to the continuation of business activities.
(2) In the course of the research, development and manufacture of its products as well as in the sale and disposal of its products and goods, including those manufactured by other companies, the Group will at all times remain fully aware of the importance of environmental protection. The Group will produce environmentally conscious products, complying with environment-related laws and regulations.

3. Establishment of Systems for Ensuring Safety

In the course of the research, development and manufacture of its products as well as in the storage and transportation of its products and goods, including those manufactured by other companies, and in the provision of its services, the Group will comply with safety-related laws and regulations. At the same time, the Group will continually strive to increase the sophistication of its systems for ensuring safety.

4. Security and Export Control

To fulfill its responsibility to help maintain international peace and safety, the Group will comply with laws and regulations that control the export of cargo and technologies.

5. Nurturing Sound Relationships with Political and Governmental Organizations

The Group will nurture highly transparent relationships with political and governmental organizations, avoid behavior that can be alleged to constitute misconduct, and cultivate fair and sound relationships with such organizations.

6. Severing Ties with Antisocial Forces

The Group will take a firm stand against antisocial forces that pose a threat to public order and safety, and will thoroughly separate itself from any relationship with such forces.

Ⅲ. Relationships with Customers and Trading Partners

1. Reliability of Products and Services

With a constant focus on safety requirements, the Group will develop and manufacture products and services that have value to society. In doing so, the Group will strive to implement a higher level of quality assurance in order to meet the quality requirements of its customers and consumers and earn their trust.

2. Fair, Free and Transparent Competition and Reasonable Trade

(1) The Group will comply with laws and regulations relating to cartels, bid rigging, the maintenance of resale prices and abuses of dominant position. In doing so, the Group will conduct reasonable transactions by engaging in fair, free and transparent competition.
(2) The Group will establish and comply with basic purchasing policies to ensure the fairness and transparency of its procurement activities, including work that is consigned or contracted out.
(3) The Group will select its trading partners not only based on economic rationality, but also after taking into account the initiative shown by these trading partners to fulfill their social responsibilities.
(4) The Group will comply with laws and regulations related to the protection of subcontractors.

3. Entertainment and Gift Giving

(1) When any person in the Group's employ entertains or provides gifts to customers or trading partners or is the recipient of gifts or entertainment, the value and nature of such gifts and entertainment shall not be in excess or violation of social norms or of internationally accepted conventional wisdom.
(2) With the desire to abolish empty formalities, all persons in the Group's employ should abstain from inter-Group gift-giving as well as exchanges of gifts or other items on the individual level, except in those cases that fall within acceptable business norms.

4. Other Companies' Trade Secrets

(1) The Group shall not, directly or indirectly, acquire other companies' trade secrets in a dishonest manner. Also, in no case shall it, directly or indirectly, use such secrets in a dishonest manner.
(2) The Group shall not use another company's trade secrets except for purposes permitted by the said company.

Ⅳ. Relationship with Shareholders and Investors

1. Timely, Appropriate and Easy-to-Understand Information Disclosure

The Group will endeavor to disclose not only information on its business management and financial status, but non-financial information, including data on the products and services that it provides to society as well as on the environmental and social aspects of its business operations. In addition to its shareholders and investors, the Group will publicly disclose such information for the benefit of society and strive to make such disclosure timely, appropriate and easy-to-understand.

2. Prevention of Insider Trading

The Group will strive to prevent any person in its employ from exploiting non-public information pertaining to matters inside or outside the Group that he/she has come to know of in the course of his/her duties for the purpose of selling or buying securities, including stocks, for his/her own gain and, further, to prevent such persons from exploiting non-public information to provide benefits or favors to a third party.

Ⅴ. Relationship with Executives and Employees

1. Respect for Human Rights and Prohibition of Discrimination

(1) The Group will value the diversity, character and personality of each person in its employ and will not discriminate on the basis of race, ethnic origin, gender, creed, nationality, religion, disability, disease or educational background.
(2) The Group will have no involvement with child labor or forced labor.
(3) The Group will allow no person in its employ to degrade individual dignity in any manner, including by speaking or acting in ways that bring discomfort to others.

2. Respect for Privacy

The Group will respect the privacy of the persons in its employ and properly manage their personal information.

3. Compliance with Labor-Related Laws and Regulations

The Group will comply with labor-related laws and regulations and strive to maintain a comfortable working atmosphere.

4. Workplace Safety and the Promotion of Health

(1) The Group will strive to maintain a safe and clean working environment.
(2) The Group will steadily take steps to prevent work-related injuries or deaths.
(3) The Group will always pay attention to the mental and physical health conditions of the persons in its employ.

Ⅵ. Our Handling of Group Assets and Financial Reporting

1. Appropriate Use of Group Assets

The Group will efficiently utilize its tangible and intangible assets, protect such assets against impairment and theft, prohibit any personal use of such assets and ensure that such assets are appropriately administered.

2. Reliable Financial Reporting

(1) The Group will implement proper accounting procedures in accordance with generally accepted accounting standards. Accordingly, the Group will accurately record all transactions related to business activities and properly maintain such records.
(2) The Group will not make any false or fictitious statements or reports of financial information.

3. Management of Confidential Information

(1) The Group will properly manage its own confidential information in accordance with its corporate rules.
(2) In the event the Group needs to disclose such confidential information to the outside, the Group shall ensure that prior approval has been obtained in accordance with predetermined procedures set out in its corporate rules and work to prevent the unexpected leakage of information by taking such steps as concluding non-disclosure agreements.
(3) The Group shall handle any personal information acquired in the course of business only within the scope of its purpose of use. In cases where the Group needs to use such personal information for purposes beyond said scope, it shall obtain prior consent from the individual concerned.

4. Appropriate Use of Information Systems

The Group will appropriately use and administer its in-house information systems in accordance with its corporate rules.

5. Protection and Use of Intellectual Property Rights

(1) The Group will appropriately use its own intellectual property rights as important assets and work to protect and maintain such rights.
(2) The Group will use the intellectual properties for which another party holds the rights only after concluding an appropriate agreement between the Group and said other party, and it shall not use such rights in a dishonest manner.

Supplement Upon the prior consent of Tokuyama Corporation, Group member companies may partially amend the content of these Guidelines to reflect applicable laws and regulations as well as local cultural considerations.

(Established on March 28, 2012)

Tokuyama Group's Five Conscience Clauses

Our behavior shall:

❶ Comply with laws, regulations and internal rules
❷ Conform to the Tokuyama Group Code of Conduct
❸ Justify the trust of customers and trading partners
❹ Earn the respect of society and general consumers
❺ Maintain standards that can be spoken of with pride in front of family members and coworkers

(Established on May 12, 2009)

Third-Party Comments

A Review of Tokuyama's *CSR Report 2012*

Eriko Nashioka
Certified Public Accountant, Certified Tax Accountant and Director of the Institute for Environmental Management Accounting

A part-time lecturer in environmental accounting and environmental auditing for the Faculty of Commerce of Doshisha University. In 1991, she joined the Environmental Auditing Section, the Third Department at the Osaka Office of Ota Showa & Co., currently Ernst & Young ShinNihon LLC, where she worked as a consultant concerning accounting audits (the Commercial Code, the Securities Exchange Law and the Small and Medium-sized Enterprise Investment Business Corporation Act), environmental accounting and environmental reports. She completed her studies in environmental management at the Doshisha University Graduate School of Policy and Management in 1997. From April 2001 to March 2004, she was chief researcher in the Enterprises and the Environment project run by the Kansai Research Center of the Institute for Global Environmental Strategies. In April 2004, she joined the management of the Institute for Environmental Management Accounting. She was involved in a number of committees, including the technical subcommittee on sustainability information disclosure in the Management Research Committee of the Japanese Institute of Certified Public Accountants and other committees under the Ministry of the Environment and the Ministry of Economy, Trade and Industry. She is a member of the primary screening committee for the Environmental Report Award co-organized by Toyo Keizai Inc.

Foundations of CSR Management Established

Positioning Corporate Social Responsibility (CSR) as an important management issue, Tokuyama clarified its basic philosophy on CSR management and formulated the Tokuyama Group Guidelines for Business Activities. Keeping in mind its relationships with the six types of stakeholders, Tokuyama is working to strengthen its management, focusing on CSR management as one of the foundations of its corporate activities. I highly praise Tokuyama for these approaches toward CSR. It is notable that Tokuyama has established the groundwork for accomplishing further global expansion and undertaking R&D activities with an eye to developing new businesses.

Implementing the Three Growth Strategies Defined by the Centennial Vision

Noting that it will mark the centennial anniversary of its founding in 2018, Tokuyama announced its Centennial Vision in 2008. This ten-year plan envisions the direction and future of the Group. This Report clearly communicates the specific steps Tokuyama has taken toward achieving this long-term vision, illustrating the steady progress the Group has made. Having clarified the Centennial Vision's three strategies—"Growing," "Creating" and "Integrating"—in 2011, Tokuyama lays out concrete steps in 2012. These steps focus on three areas: global expansion strategies, as represented by the new Malaysia Factory; new technologies and new businesses focusing on solutions for future energy shortages; and the renovation of the namesake Tokuyama Factory, which the Company was named after, to create a factory that proactively interacts with the local community and maintains respect for its roots while pursuing business expansion. However, most of the information presented in the *CSR Report 2012* is qualitative. Moving forward, it will be essential to incorporate more quantitative information, for example, indexes that clearly show the Group's progress toward its targets for 2018.

Nurturing Human Resources Globally

Beginning with the February 2011 groundbreaking ceremony for the new Malaysia Factory, Tokuyama has been promoting the exchange and nurturing of human resources in a variety of ways, aiming to pass on Tokuyama's DNA to Malaysian staff. By devoting considerable space to such initiatives in the *CSR Report 2012*, Tokuyama demonstrates its determination to create a new corporate culture, slowly but surely, by closely working together, while maintaining high regard for both the Company's existing corporate culture and Malaysia's local culture and natural environment. Its actions with regard to its Malaysian operations will be highly praised as a global expansion best practice. This Report shows that Tokuyama is proactively giving consideration to CSR when it promotes such initiatives as cross-cultural exchanges, the nurturing of human resources and the provision of education and training. Such consideration is an essential part of CSR management. I have growing expectations of the excellent synergies that will be brought about in both Japan and Malaysia by Tokuyama's activities.

Corporate Social Responsibility in a Post-Earthquake Japan

After the Great East Japan Earthquake, business operators across Japan began reviewing their safety measures and emergency response methods. The earthquake also reminded them of the importance of having a business continuity plan that can be effectively implemented at a time of disaster. As presented in detail in this *CSR Report*, Tokuyama, in taking steps pertaining to such safety measures and emergency response methods, is putting emphasis on information disclosure and contributing to local communities, especially at the Tokuyama Factory. Not only is it taking steps to secure safety at the Factory, Tokuyama is also committed to facilitating communication with local communities to gain their understanding of such steps and to give local residents a sense of ease. Moreover, Tokuyama is devoting considerable effort to bolstering local infrastructure through its business. It is very encouraging for me to see that Tokuyama has such a strong awareness of its social responsibilities in local communities. In addition, Tokuyama has been continuously reporting on the steps that have been taken since the window sash incident came to light. By showing its determination to make sure that the incident will not be forgotten, Tokuyama impresses me as reliable. Looking ahead, I expect that Tokuyama will come to show greater presence in the world as a reliable company through prompt and accurate information disclosure utilizing such tools as the *CSR Report* and by further progressing toward the realization of its Centennial Vision.

Ms. Nashioka interviewing members of the Corporate Social Responsibility Division for the preparation of her third-party comments

View of the central power plant from the Nanyo Plant

In Response to Third-Party Comments

In fiscal 2011, we were provided invaluable comments regarding the promotion of a global approach in our CSR activities. We also strove to achieve transparency in our initiatives aimed at enhancing our CSR activities, to this end working to solidify our CSR management foundation. As for our global CSR approach, we have introduced such initiatives as cross-cultural exchanges, the nurturing of globally capable human resources and the provision of education and training, for example, at our Malaysia Project. We are very pleased that she evaluated our efforts so highly in this regard. Moreover, we appreciate the invaluable opinion she gave regarding the need to make it easier to see how much progress we are making toward the realization of the Centennial Vision. We will tackle this issue and strive to make these reports "visualize" the entire Tokuyama Group, in line with the strong recognition of our role in society as a company.

Masao Fukuoka
Executive Officer, General Manager of the Corporate Social Responsibility Division

CSR推進
トクヤマグループ

Tokuyama has created the above symbol for CSR promotion. Depicting a sunflower, the symbol is intended to convey the Company's active, healthy and honest stance toward CSR. Under this symbol, the Tokuyama Group will not only promote compliance and efficiency in its business operations, but will also work to develop into a vibrant, sound corporate entity that provides societal and environmental benefits and is trusted by all stakeholders.

For inquiries, please contact:

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*To ensure accessibility to as many readers as possible, our CSR reports are also available via Tokuyama's website.
www.tokuyama.co.jp/eng/csr/report/