

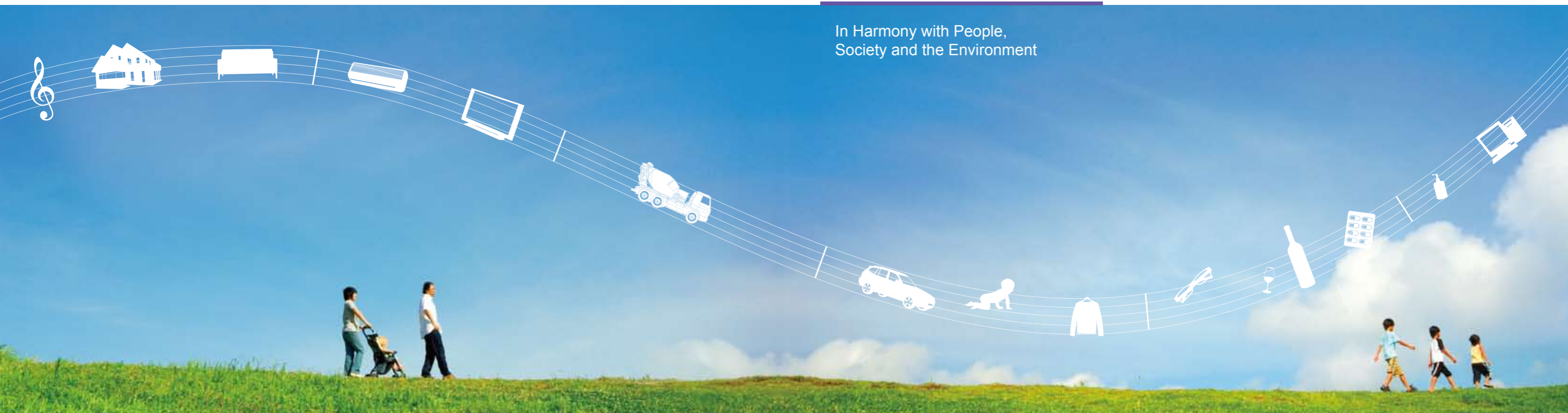
**Tokuyama Corp.**

Responsible Care Management Dept.,  
Corporate Social Responsibility Division

Shibuya Konno Bldg., 3-1, Shibuya 3-chome  
Shibuya-ku, Tokyo 150-8383 Japan  
Tel: +81 3-3499-8478  
Fax: +81 3-3499-8961  
URL: <http://www.tokuyama.co.jp/>

# CSR Report 2008

In Harmony with People,  
Society and the Environment



Staying with you all the time



This report is printed on FSC-accredited paper with pure plant oil ink, which contains no volatile organic compounds and in a dry printing process that uses no water, thus precluding release of any harmful effluents.



## We promote business operations under our management policy, “Venture Spirit & Innovation,” to create a company that is in harmony with society.

On February 16, 2008, the Tokuyama Group celebrated the 90th anniversary of its establishment. I hereby express my gratitude to all stakeholders for their committed support. We will promote business operations under our management policy, “Venture Spirit & Innovation,” as we approach the centennial of our establishment.

On the occasion of the 90th anniversary, the Tokuyama Group set out a corporate vision for the next ten years, called the Centennial Vision. It defines the optimum form of the Group as “a manufacturing company that creates a brighter future with the vitality of human resources and creativity of chemistry in harmony with society.” The Centennial Vision is based on the concept that the framework of its Human Resources-based management and Promotion of corporate social responsibility (CSR) activities will be strengthened in a bid to achieve the vision.

On the basis of this principle, this report is designed to ensure that all stakeholders have better insight into the activities and future goals of the Group, which is aiming to be a manufacturing company that is in harmony with society. Until two years ago, the report was entitled Responsible Care Report. Since last year, the report has been prepared under the new title, CSR Report. This reflects our desire to ensure consistency in our activities from the perspective of stakeholders in accordance with the CSR concept.

It is solely in the context of their relationships with stakeholders that companies receive recognition and are required to meet their responsibilities. In the light of this notion, the company engages in activities to improve its level of CSR to review individual processes in the business

activities. The Tokuyama Group’s longstanding CSR activities have three major pillars – Responsible Care activities, environmental management and the assurance and enhancement of compliance.

Responsible Care activities are voluntary, worldwide activities performed by the chemical industry to safeguard the environment, to ensure health and safety throughout the lifecycle of chemical products including development, manufacturing, distribution, utilization, final consumption and disposal. We have been engaged in these activities for more than a decade.

Environmental management aims to reorganize all business activities into an environmentally friendly form to increase corporate value and to build a sustainable society. The Tokuyama Group operates two businesses, one engaged in the manufacture of chemicals and the other in cement production. Taking advantage of this uniqueness, we have been putting effort into recycling by-products and waste. In addition, we are constantly working to help create an environmentally friendly country through energy conservation technologies, environmental technologies and the development of environmentally friendly products on the basis of the vitality of human resources and creativity in chemistry.

To improve our activities in ensuring and enhancing compliance, we set up the Sunflower Committee two years ago as a body for encouraging the operation and maintenance of internal control.

Based on these past achievements, we review these activities from the stakeholders’ standpoint in accordance with the concept of CSR to align the directions of these



efforts, and further improve and augment the initiatives.

The Tokuyama Group wishes to continue to be a corporate group that has the trust and respect of the public. We believe the trust and respect can only be maintained by continuous efforts. As we work toward the company’s centennial, the business environment is drastically changing. Amid these changes, we are committed to carrying “Venture Spirit & Innovation” into execution in relation to every process of our business activities to evolve into a corporation that is in harmony with society. We would be grateful if you could provide us with any comments and suggestions you have in relation to this report.

July 2008  
Shigeaki Nakahara  
President

## Contents

- 1 Top Message
- 3 Summary of Business
- 5 In Your Everyday Life  
- Chemistry in harmony with Society
- 7 Summary of the New Three-Year  
Management Plan (for fiscal 2008-2010)
- 9 Topic 1  
Tokuyama’s 90-Year History  
- Venture Spirit & Innovation
- 11 Topic 2  
An Ever-Evolving Integrated Production Base with  
the Full Use of Resources - Tokuyama Factory

## Tokuyama’s CSR Activities

- 13 What Are Tokuyama’s CSR Activities?
- 15 The Foundation of CSR – Being a Trusted Company
- 18 RC Promotion Structure and Operation of  
Management Systems

## Harmony with Society

- 21 Relationships with Customers
- 24 Relationships with Communities and Society
- 27 Relationships with Employees
- 29 Relationships with Shareholders and Trading  
Partners
- 30 Process Safety, Disaster Prevention and  
Occupational Health and Safety

## Harmony with the Environment

- 33 Performance for Fiscal 2007
- 34 Environmental Accounting
- 35 Commitment to the Prevention of Global  
Warming
- 37 Reduction of Air and Water Pollutants
- 38 Waste Reduction and Recycling
- 39 Development of Environmental Products and  
Technologies

## Site Report

- 42 Tokuyama Factory/Kashima Factory
- 43 Activities of the Group Companies

- 45 Comments from Third Parties
- 46 History of Tokuyama’s RC Activities
- 46 Editor’s Notes

### Editorial Policy

- *CSR Report 2008* has been prepared with the aim of bringing Tokuyama’s activities directed at meeting its Corporate Social Responsibility in fiscal 2007 to the attention of all concerned, including shareholders, investors, trading partners, employees and their families, people living near its production sites and members of the public. Reports concerning harmony with society are better covered in this report than in the last issue, *CSR Report 2007*.

- *CSR Report 2008* has been prepared based on the Environmental Reporting Guidelines (Fiscal 2007 edition) published by the Ministry of the Environment.
- *CSR Report 2008* is also available via Tokuyama’s website: <http://www.tokuyama.co.jp/>

### Scope of the Report

**Period:** All performance data are for fiscal 2007, from April 2007 to March 2008. Activities are for fiscal 2007 in general, with some for fiscal 2008.

**Companies:** Tokuyama Corporation (Environmental performance data relate to the Tokuyama factory and the Kashima factory.) Part of the performance data also includes the total value of the main production subsidiaries (See page 43).

**Region:** Activities in Japan

**Date of issue:** October 31, 2008 (The next edition will be issued in October 2009.)

# Summary of Business

## Company Outline

Corporate Name: Tokuyama Corporation  
 Established: February 16, 1918  
 Capital: 29,975 million yen (as of March 31, 2008)  
 Registered address: 1-1, Mikage-cho, Shunan city, Yamaguchi Japan  
 Head office: Shibuya Konno Bldg. 3-1, Shibuya 3-chome Shibuya-ku, Tokyo 150-8383 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: 47  
 Number of Equity-Method Companies: 13

## Business Segments and Major Products (including group companies)

### Chemicals



Caustic soda, soda ash, calcium chloride, sodium silicate, vinyl chloride monomer, polyvinyl chloride resin, propylene oxide, isopropyl alcohol, methylene chloride, biaxial-oriented polypropylene films, co-extrusion multi-layer films, cast polypropylene films, microporous films

< Principal Group Companies >  
 Shin Dai-ichi Vinyl Corporation, Sun-Tox Co., Ltd. and Sun Arrow Chemical Co., Ltd.

### Specialty Products



Polycrystalline silicon, precipitated silica, fumed silica, aluminum nitride, dental materials and equipment, pharmaceutical ingredients and intermediates, plastic lens materials for glasses, ion-exchange membranes and systems, metal washing solvents, high-purity chemicals for the electronics manufacturing, clinical analyzers and systems, gas sensors and gas detectors

< Principal Group Companies >  
 A&T Corporation, Figaro Engineering Inc. and Tokuyama Dental Corporation

### Cement, Building Materials and Others

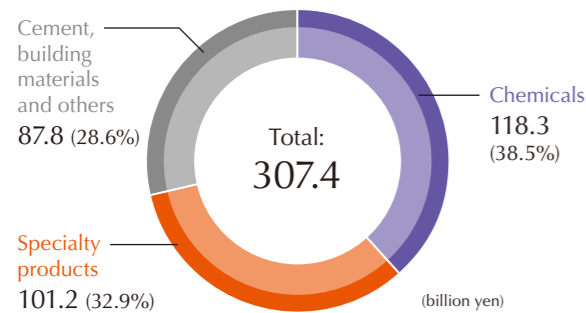


Ordinary Portland cement, high early-strength Portland cement, Portland blast furnace slag cement, ready-mixed concrete, plastic window sashes, cement-type stabilizer and waste treatment

< Principal Group Companies >  
 Tokuyama Tsusho Trading Co., Ltd., Shanon Corporation and Tokuyama Ready Mixed Concrete Co., Ltd.

\*For further information about the products, see also the following page.

## Sales Breakdown by Segment (Fiscal 2007)



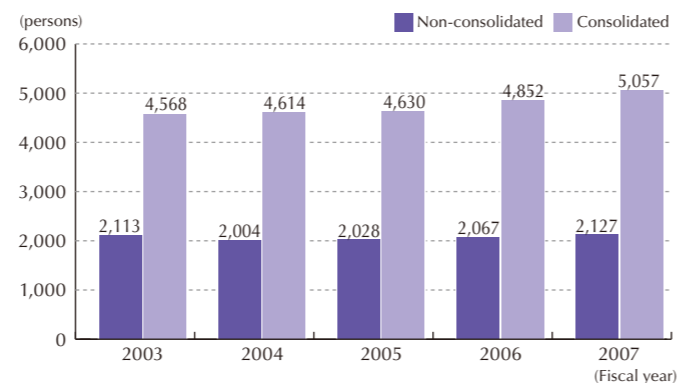
## Net Sales



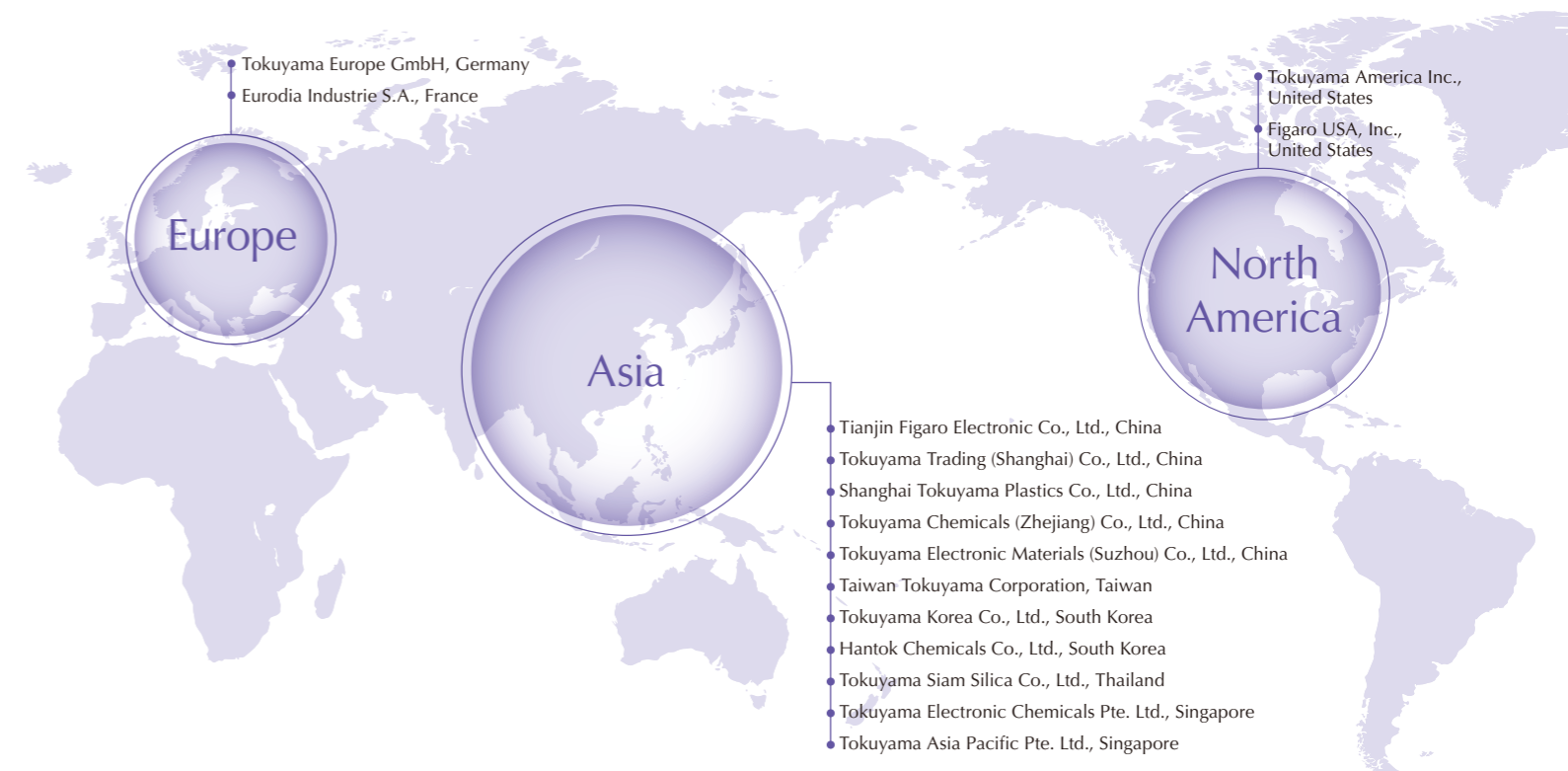
## Operating Profit



## Number of Employees

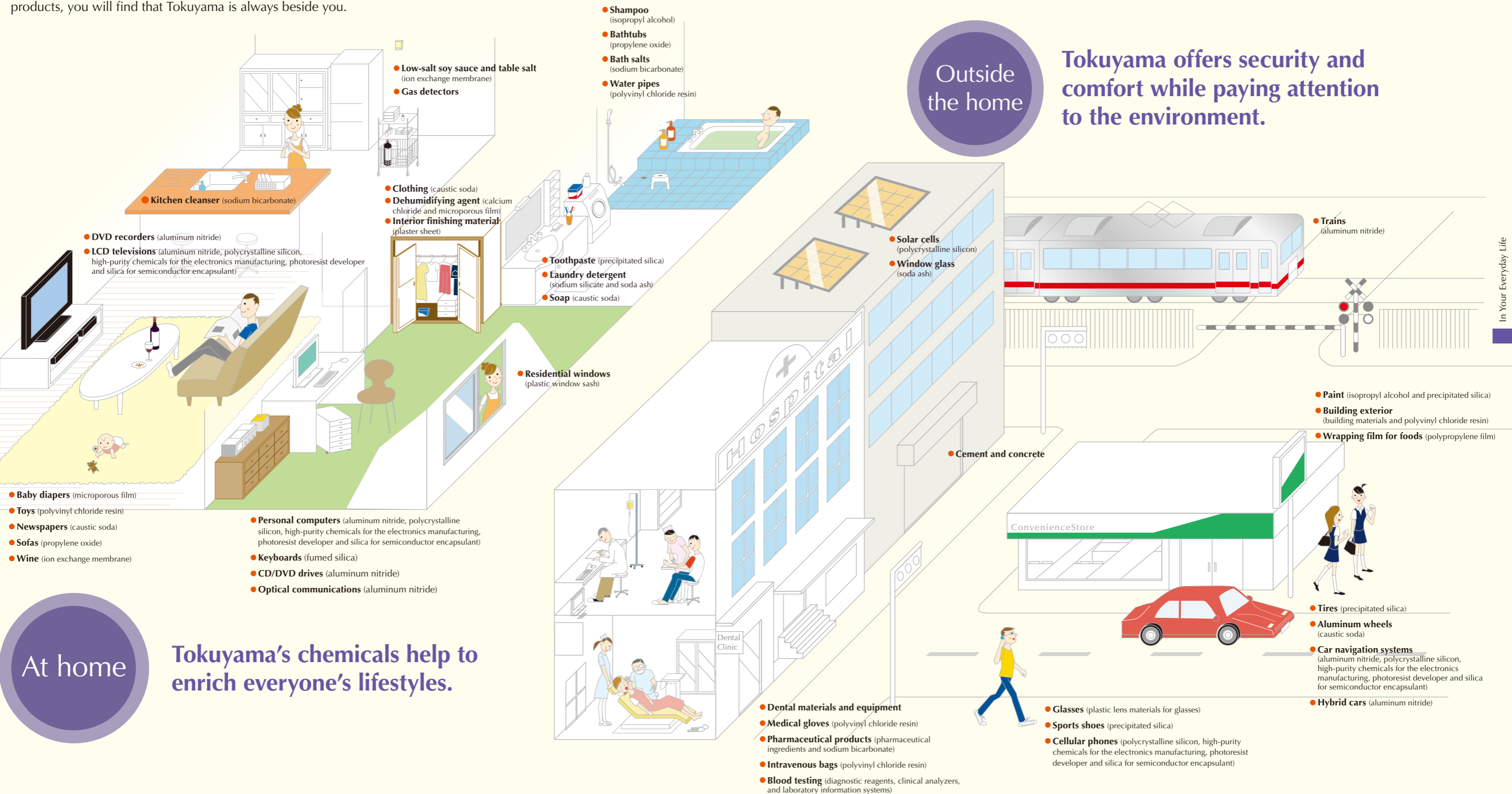


## Tokuyama's Global Network



# In Your Everyday Life - Chemistry in harmony with Society

Tokuyama has devoted itself diligently to manufacturing in an effort to serve society and to bring happiness to people since its establishment. Although they may attract little attention, products that are valuable in everyday life help you in your daily life. If you notice our products, you will find that Tokuyama is always beside you.



At home

Tokuyama's chemicals help to enrich everyone's lifestyles.

Outside the home

Tokuyama offers security and comfort while paying attention to the environment.

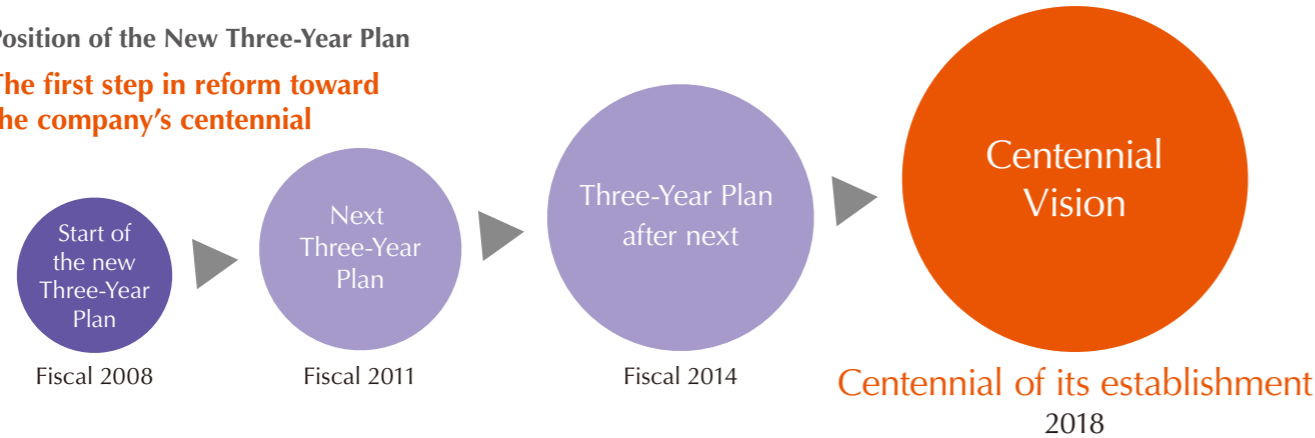
# Summary of the New Three-Year Management Plan (for fiscal 2008-2010)

The Tokuyama Group's Centennial Vision is to become "a manufacturing company that creates a brighter future with the vitality of human resources and creativity of chemistry in harmony with society." All members of the Group will strive to ensure that the Group develops into this optimum form.

In ten years, on February 16, 2018, Tokuyama will mark the centennial of its establishment. The basic strategies for the Centennial Vision is to strengthen its strategically growing businesses and international competitiveness through a process of selection and concentration. We are committed to "Human Resources-based management" and the "Promotion of CSR activities." Their purpose is to support the basic strategies. The new Three-Year Management Plan is seen as a medium-term management plan that serves as the first step toward achieving the Centennial Vision. In accordance with the basic strategies for the Centennial Vision, the growth strategies described below will be implemented.

## Position of the New Three-Year Plan

The first step in reform toward the company's centennial



**Growth Strategies under the New Three-Year Plan**

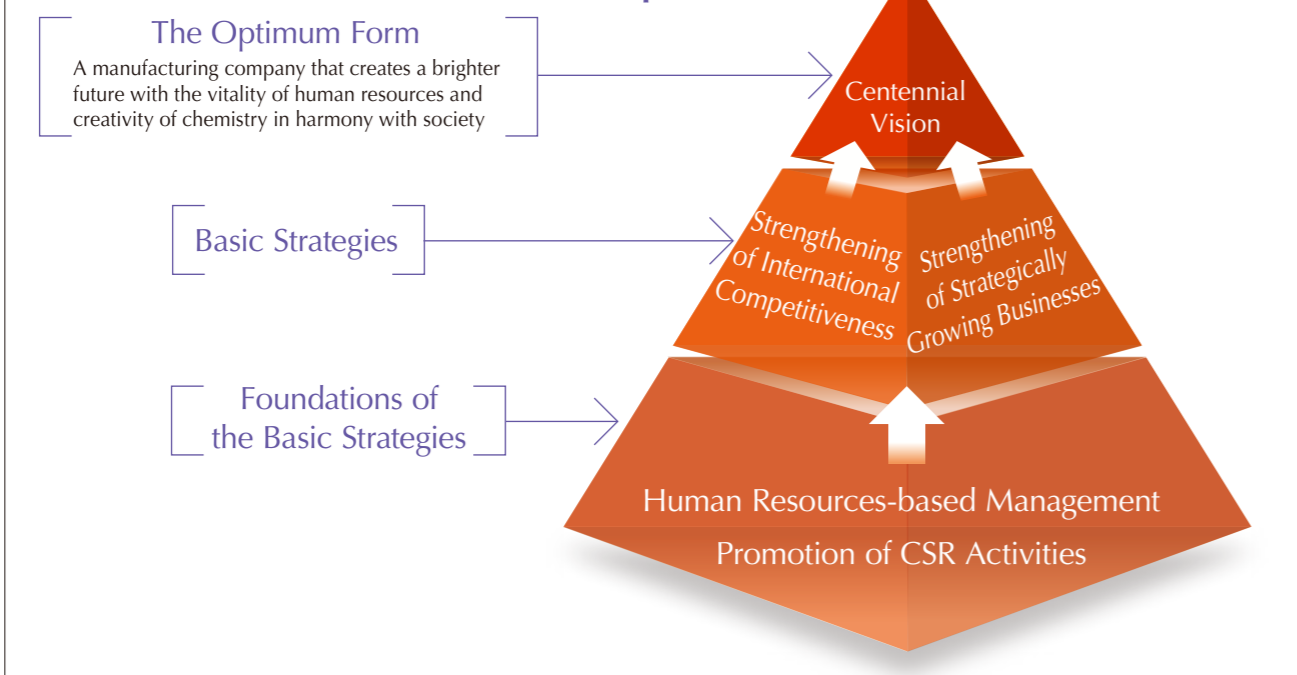
- Selection and Concentration for Attacking
- Creation of New, Globally Competitive Businesses
- Strengthening of Competitiveness through Productivity Improvement

**Basic Strategies for the Centennial Vision**

- Strengthening of Strategically Growing Businesses
- Strengthening of International Competitiveness

## Schematic Representation of the Basic Strategies for the Company's Centennial

Key Concept: **Venture Spirit & Innovation**



## Growth Strategies under the New Three-Year Plan

### 1. Selection and Concentration for Attacking

The scope of the Tokuyama Group's businesses encompasses a wide array of products ranging from materials to components. The markets served by the Group have a multi-polar structure. Through the use of two criteria, namely international competitiveness and lifecycle, these businesses are classified into four categories – growing materials business, growing components business, foundation business and independent component business. In each of the four categories, we will continue with a process of selection and concentration to take advantage of the strengths of each business and new business opportunities.

#### Growing Materials Business

Providing polycrystalline silicon and other materials, the growing materials business addresses the key challenges of increasing the worldwide market share and reducing the labor required in the manufacturing processes. To increase competitiveness, we will continue active investment of our management resources and will expand the scale as needed. We will also study production at optimal new sites.

#### Growing Components Business

The growing components business, including fine chemicals, aims at building a high profit structure through a process of selection and concentration that are suited to each business characteristics. To reach this goal, we will step up our marketing activities in close association with the markets and move to a business model based on solution proposals. To develop the business, we will also work actively on collaborations with other companies.

#### Foundation Business

In the foundation business, most production takes place at the Tokuyama factory. By regarding the entire factory as a unit of manufacturing facilities, we will create a system to optimize the use of energy and human resources. For this purpose, we will engage in a process of selection and concentration with the aim of further strengthening the Tokuyama factory.

#### Independent Components Business

A key challenge is to enhance the presence within the Tokuyama Group while pursuing business continuity and uniqueness. We will therefore consider cooperation with other companies.

### 2. Creation of New, Globally Competitive Businesses

To create a structure that ensures constant earnings into the future, we will work to establish new profit drivers comparable with the Si business from the perspective of medium- to long-term growth. We will focus our efforts on surely bringing development projects that are close to commercialization into commercial operation and on finding and cultivating new themes of development that are close to existing strategically growing businesses.

### 3. Strengthening of Competitiveness through Productivity Improvement

We will restructure both our manufacturing infrastructure and information infrastructure to boost our competitiveness through improved productivity.

#### Restructuring of the Manufacturing Infrastructure

We will position the Tokuyama factory as the mother factory of technology and know-how, and link it to the Kashima factory and other plants in the Group and strive to realize an internationally competitive manufacturing infrastructure.

#### Restructuring of the Information Infrastructure

A new mission-critical system will be put into operation in fiscal 2008. By developing the information infrastructure, we aim to upgrade our managerial accounting and improve productivity of the manufacturing section and the office work section.

## Build Systems for the Growth Strategies

We will build the systems and organizations that act as foundations for implementing the basic strategies for the Centennial Vision and the growth strategies under the new Three-Year Plan and address the reform of human resources. To achieve these objectives, we will take up the challenges listed below.

### 1. Securing Managerial Resources and Making the Optimum Allocations

We will enhance the system for making the optimum allocation of managerial resources from the perspective of total optimization and promptly invest managerial resources in growth areas.

### 2. Globally Competitive HR Development

We will systematically develop human resources that play a key role from a global perspective with a view to overseas expansion.

### 3. Strengthening Corporate Governance

To establish governance that facilitates an immediate response to the external environment, we will consider introducing a system for external directors and operating officers.

### 4. Full Utilization of the Balanced Scorecard

We will work to establish the balanced scorecard as a mechanism for running the PDCA cycle and to strengthen the functions for implementing the strategies.

Final Targets under the New Three-Year Plan

Net sales **370 billion yen** or more

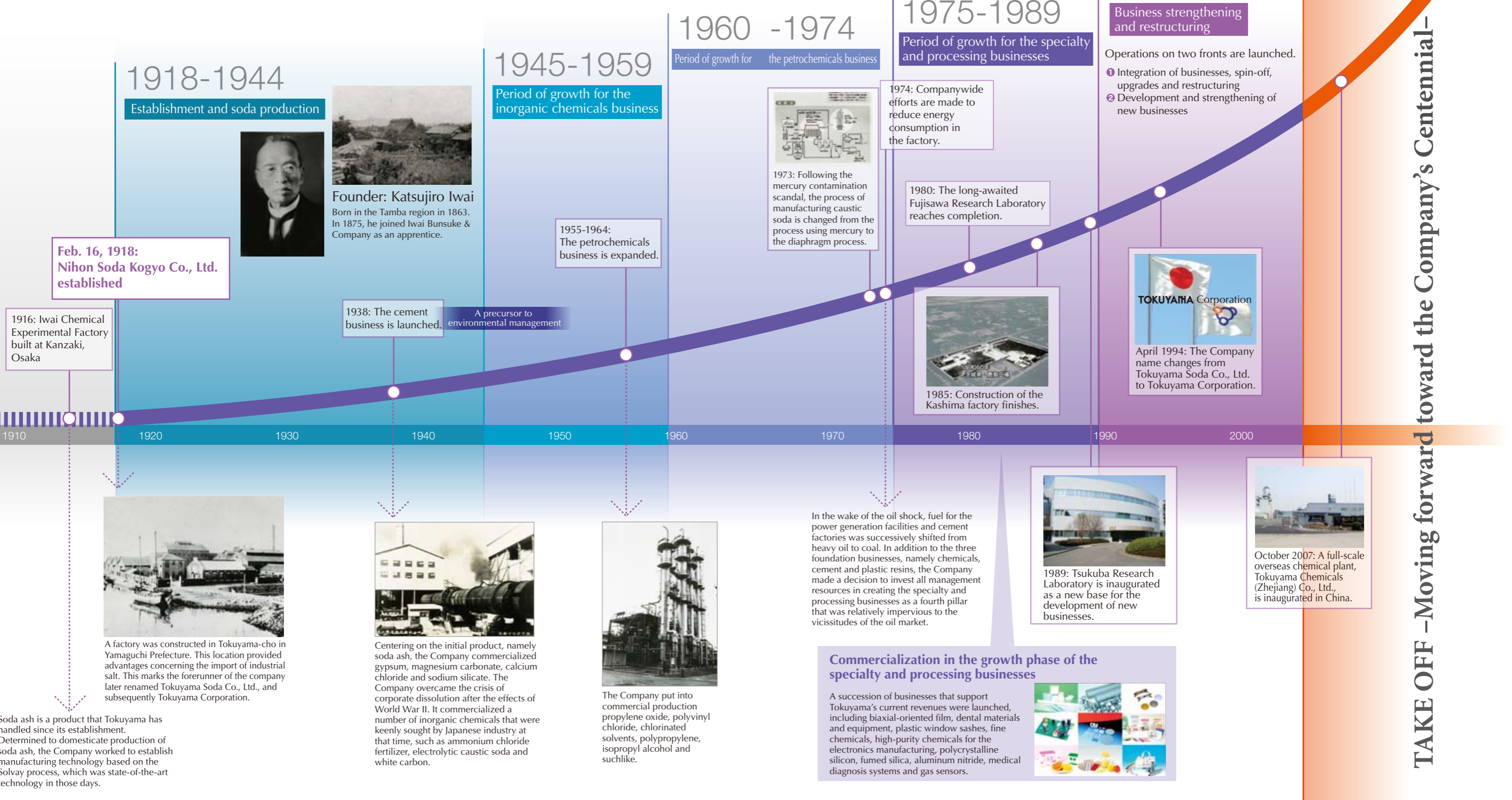
Ratio of operating income to sales **12% or higher**

Overseas sales ratio **22% or higher**

Operating income before depreciation per employee **14 million yen** or more

# Tokuyama's 90-Year History – Venture Spirit & Innovation

In February 1918, the predecessor to Tokuyama Corporation was established in Shunan City in Yamaguchi Prefecture. Having worked on innovations since that time, it marked its 90th anniversary this year. Its history represents a process of evolution for Tokuyama that is synchronized with changes in Japan and the rest of the world.



# An Ever-Evolving Integrated Production Base with the Full Use of Resources – Tokuyama factory

The Tokuyama factory is Tokuyama's leading production facilities. Equipped with one of Japan's largest private power generation facilities, it represents the sophisticated integration of every manufacturing process. Using a highly efficient production structure, it has achieved a zero emission rate of nearly 100%. Tokuyama is making every effort to build a sustainable society. For example, its cement business actively accepts waste from outside the Company.

## Continuous Efforts Toward Integration

### Superiority in Infrastructure that Supports a Leading Production Base

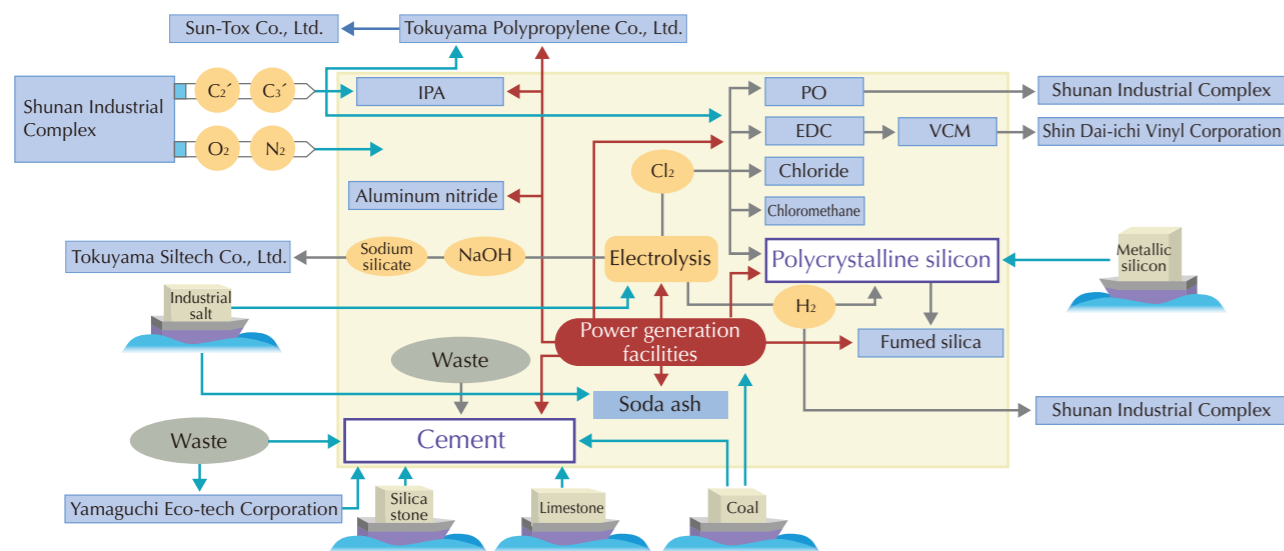
The Tokuyama factory is located in the Shunan Industrial Complex fronting the Seto Inland Sea in the south-eastern part of Yamaguchi Prefecture. As one of the largest factories in Japan, occupying 1.91 million square meters, it is Tokuyama's core production center. It consists of three plants – the Tokuyama plant chiefly for manufacturing inorganic chemicals, the Nanyo plant for manufacturing cement and the Higashi plant for polycrystalline silicon and organic chemicals. These three plants are interlinked by our private undersea tunnel and bridge. The factory also has a well-developed port infrastructure that incorporates 22 internal berths with a depth of 12 meters and one 14-meter-deep public wharf.

### Giving Form to an Unprecedented Level of Integration

Since its inauguration in 1918, the factory has been aspiring to become an integrated production base in which different businesses are closely interlinked via energy, materials and technologies. Plants that manufacture inorganic and organic chemicals, cement, electronic materials and other products are deployed in a strategically integrated manner. They form a highly integrated structure that enables the effective mutual use of raw materials, products, by-products, waste and utilities.

The factory has been making a determined effort concerning the recycling of by-products and waste generated from within. In fiscal 2007, it effectively utilized 94.2% of waste and achieved a zero emission rate of 99.9%.

### Integration in the Tokuyama Factory



### A Highly Efficient Energy System Based on Private Power Generation

At the heart of the integration of the Tokuyama factory is its private power plant that features one of the largest power generation capacities in Japan, namely 552,000 kW. The electric power and steam generated are supplied through power lines and pipes to the electrolysis plant and other plants. The factory makes effective use of the steam as well as electric power to attain a high level of energy efficiency.



A private power plant featuring one of the largest power generation capacities in Japan



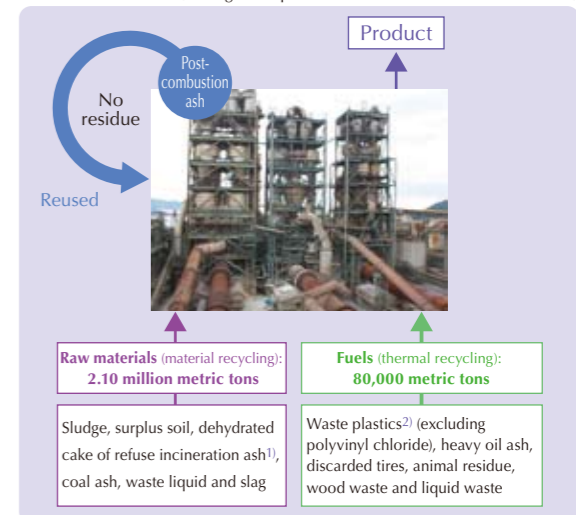
## Recycling Open to Society – Active Acceptance of External Waste

The cement plant constitutes another core of the integration in the Tokuyama factory. As raw materials, it makes effective use of by-products from the Company's soda ash plant and coal ash from private power plants. It also accepts a large amount of waste and by-products from outside the Company and conducts recycling operations that are open to society. A large portion of the waste and by-products can be used as raw materials for cement production as it contains some elements that are identical to those contained in limestone, clay and silica stone, which are used as raw materials for cement. Combustible waste can also be used as an energy source. The temperature in the cement kiln\*1 reaches 1,000 to 1,800 degrees Celsius, a temperature is so high that the combustible portion is completely burnt and the remaining ash after combustion is used as an ingredient for cement. This means that the cement kiln differs from an incinerator in that it generates no residue. In fiscal 2007, the factory recycled 2.18 million metric tons of waste and by-products, including 0.32 million metric tons generated within the Company.

With a view to creating a recycling society, the Tokuyama factory is making continuous efforts every day to improve itself into a more advanced production center.

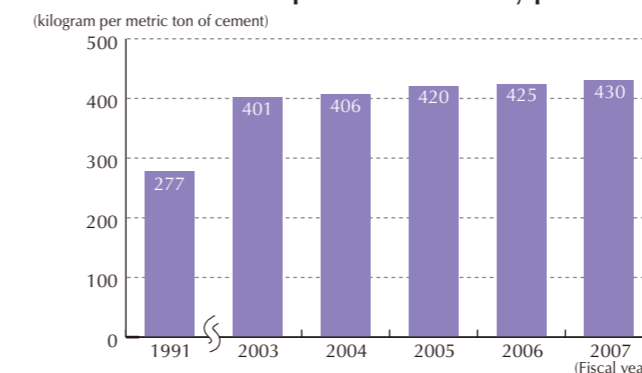
### Process Flow for the Recycling of Waste and By-products in Cement Production

(The figures represent the relevant values for fiscal 2007.)

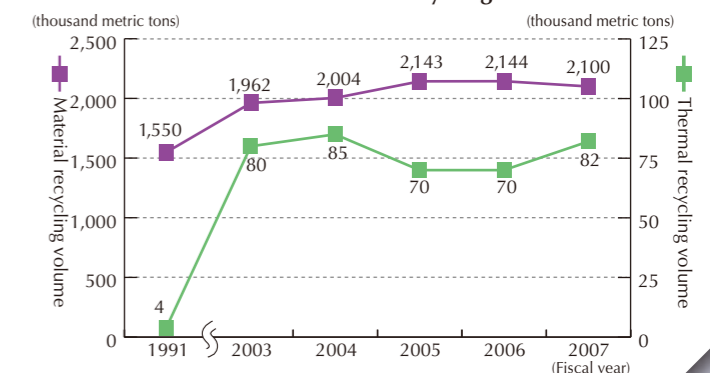


- 1) The factory accepted incineration ash generated from municipal refuse incineration facilities in Yamaguchi Prefecture after pretreatment by Yamaguchi Eco-tech Corporation, a joint venture consisting of the Company and Ube Industries, Ltd.
- 2) A technology for stably injecting a large amount of crushed waste plastics from the upper part of the kiln was developed. The crushing and combustion capacity increases each year to meet the growing demand to accept such waste.

### Trend in Unit Consumption of Waste and By-products



### Trend in Material and Thermal Recycling Volumes



\*1 Cement kiln: A rotary kiln used for sintering raw materials in the cement plant

## What Are Tokuyama's CSR Activities?

The Tokuyama Group has a basic management policy of practicing management in harmony with society so as to coexist with society and thereby establish itself as a corporate group whose members are the enterprises of first choice by their customers.

### Message



**Etsuro Matsui**  
Managing Director  
General Manager  
Corporate Social Responsibility Div.

### For sustainable growth of the business and society

Tokuyama celebrated the 90th anniversary of its establishment. Throughout its history, the Company has always been aspiring to gain the trust and respect of society. In 1994, we adopted a basic policy of practicing management in harmony with society. The following year, we built a framework for conducting responsible care activities and since then, we have been enhancing the activities through PDCA. Although the term CSR is relatively new, we have been constantly engaged in activities that

essentially operate on the same principle as CSR activities to the present. The roles that enterprises are required to play constantly vary with changes in the circumstances. The nature of corporate activities should always be questioned in terms of its relationship with society. In response to the change, Tokuyama will consistently be seeking the sustainable growth of business and society from a long-term perspective.

## The Philosophy behind CSR Activities

Tokuyama carries out CSR activities in accordance with its basic policy of engaging in management in harmony with society. Understanding that they will help ensure continuation of the business and establish a sustainable future together with society, we are striving to attain better marks from our stakeholders and to earn the recognition and appreciation of society, to which the stakeholders belong.

As a foundation for CSR activities, we will continue with sound corporate governance and compliance to increase management transparency and ensure thorough internal control and risk management.

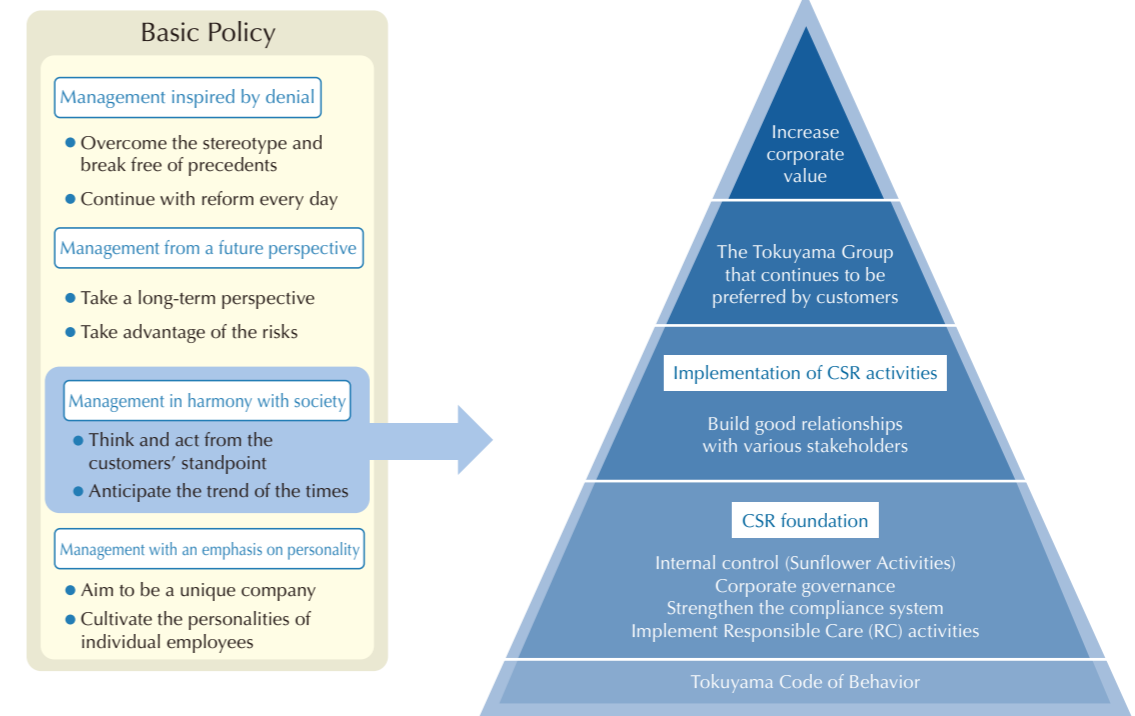
The Tokuyama Group is engaged in what it called the Sunflower Activities. They refer to activities aimed at ensuring that the essential factors of internal control become permanently established within the Group.

In accordance with the Tokuyama Code of Behavior, we will work to ensure good relations with all stakeholders and engage in management in harmony with society in a bid to develop into a Tokuyama Group whose members are the enterprises of first choice by their customers.

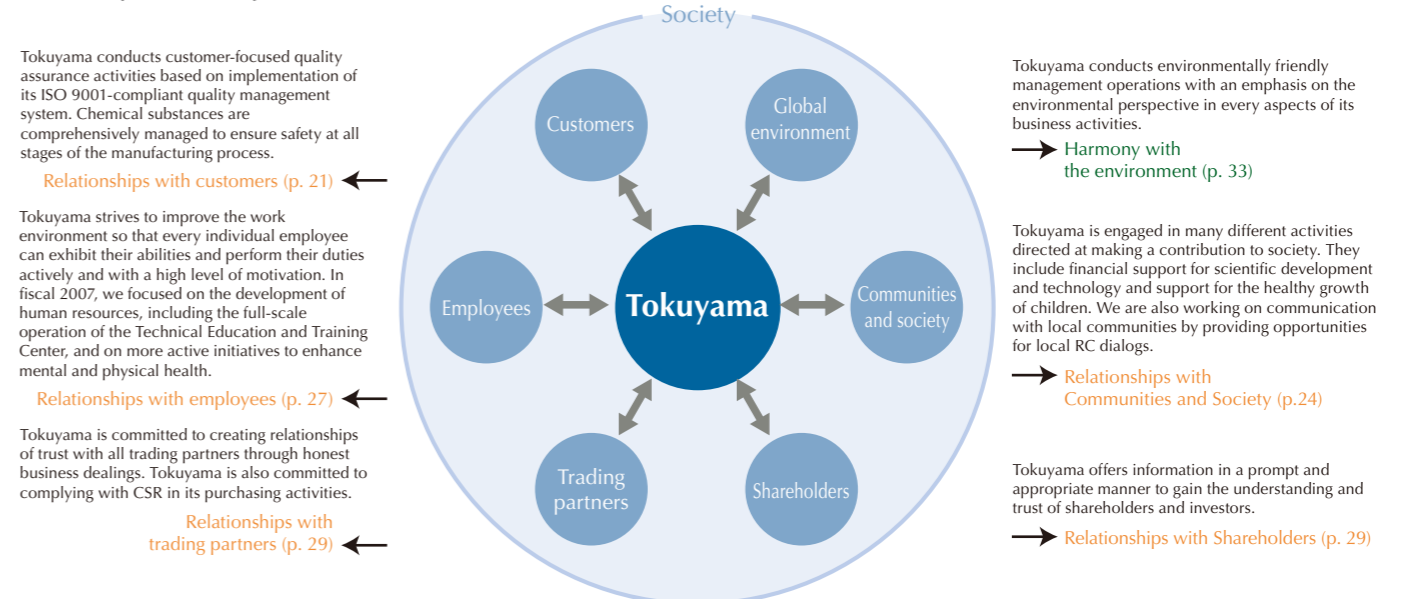
### Tokuyama Code of Behavior

- 1 Fair Business Operations**  
We will compete with rival companies in a fair, transparent and liberal manner. We will maintain strong, regular relationships with politicians and administrative organizations.
- 2 Compliance**  
We will comply with the laws, regulations and rules. We will remain resolute in our dealings with antisocial groups that threaten the order and security of civilized society.
- 3 Responsible Care**
  - We will develop and manufacture products that are safe and that serve a valid use in society and make them available to members of society to gain the confidence of our consumers and customers.
  - Of our own volition, we will actively engage in addressing global environmental issues, the recycling of resources and other activities directed at environmental conservation for a wide-ranging perspective.
- 4 Communications**  
We will enhance communications with the various stakeholders in society, including our shareholders, through the proactive and fair disclosure of information.
- 5 Social Contributions**
  - We will make a positive social contribution in as a *good corporate citizen*.
  - In our dealings in foreign countries, we will respect local cultures and customs and conduct our business operations in a manner that contributes to the development of local communities.
- 6 Solid Corporate Culture**  
We will strive to create a safe, uninhibited and comfortable work environment in which our employees can achieve mental and physical well-being, where the personality and individual characteristics of each employee are respected.
- 7 Roles of Management**  
Management is required to understand that its role is to comply with the philosophy underlying this Code of Behavior, to take the initiative, to make an effort to improve the internal system to collect internal and external opinions and to ensure strict compliance with corporate ethics. If a situation arises in which any of the provisions of this Code of Behavior are violated, management must immediately make public the relevant information in an appropriate manner and be accountable. In this case, management must investigate the causes of the violation, identify the people involved, adopt countermeasures to prevent any recurrence and impose disciplinary actions on the people involved, including themselves.

## Tokuyama's CSR Approach



## Tokuyama's Major Stakeholders





## The Foundation of CSR - Being a Trusted Company

The Company's social mission is to develop, manufacture and supply to society useful products as a manufacturer with full consideration given to safety and the environment. We have adopted the basic principle of practicing management in harmony with society. For the Tokuyama Group to follow this basic principle and evolve into a business grouping whose members are the enterprises of first choice by their customers and to meet its corporate social responsibility, we believe that it is essential to continuously work to enhance corporate governance, to construct and improve the internal control system and to develop a framework of compliance.

### Corporate Governance

The system of corporate governance is very important in successfully improving corporate value. We believe that we need to conduct everyday inspections and take the necessary steps to ensure solid, ongoing operations. The Board of Directors meets at least once a month to make resolutions on the basic policy and strategy for management of the group, to discuss and decide important matters concerning the manner in which business is conducted and to supervise business operations. As of the end of June 2008, the Board of Directors consists of 14 directors and is chaired by the president.

A director's term of office is one year. The purpose is to clarify his or her duties and responsibilities and to respond immediately to changes in the business environment.

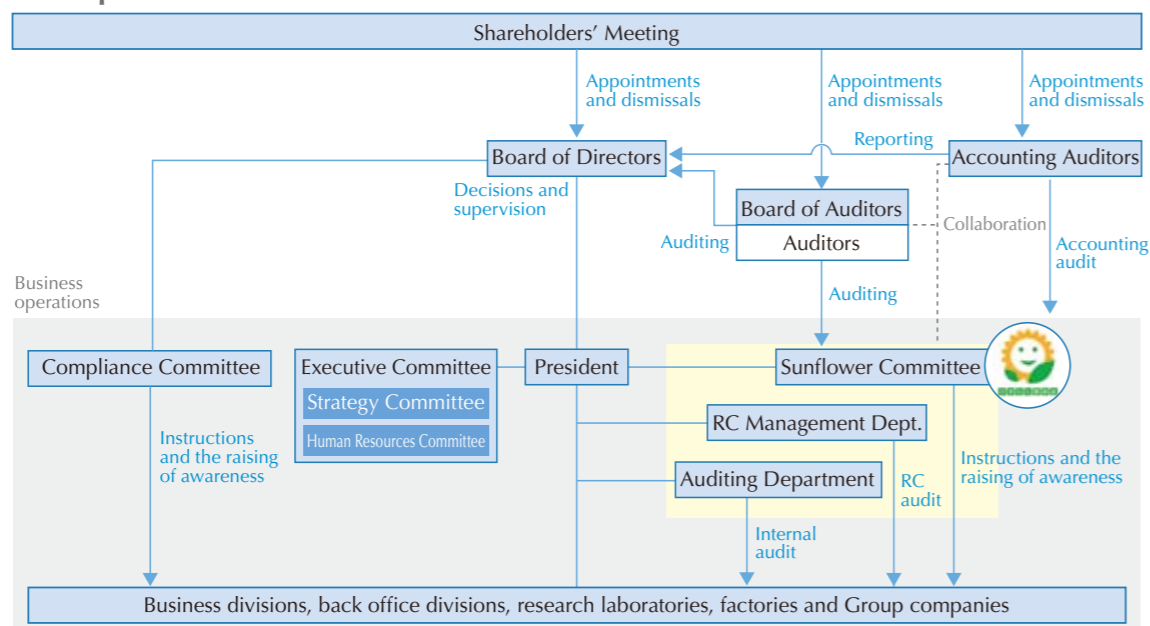
The Executive Committee is an advisory body to the president for deliberating matters to be referred to the Board of Directors and other critical managerial matters. It was set up to ensure agility and efficiency in business operations as well as quick

decision-making. The Executive Committee consists of the heads of four business divisions and those nominated by the president from the directors and associate directors.

The Board of Auditors currently has four members, including two external auditors. Each auditor attends the meetings of the Board of Directors and other key meetings and exchanges information with the internal audit section and accounting auditors as needed in a bid to increase the effectiveness and efficiency of auditing. Standing auditors also join the Executive Committee and provide opinions for maintaining a system for monitoring the general manner in which the directors discharge their managerial duties.

The Auditing Department is an internal auditing body that is independent of divisions engaged in business operations, and currently consists of six members. It performs regular internal audits of different divisions and affiliated companies in the Group.

### Corporate Governance Structure



### Internal Control

The Tokuyama Group is using the term Sunflower Activities selected from the suggestions submitted by staff members in the Group in order to create and continuously enhance the internal control system and to ensure that the activities will be implemented over a long period of time. This name represents the attitude and determination of the officers and employees in the Group to perform their duties by remaining cognizant of the fact that they should always behave in a manner that enables them to stand proud.

The Sunflower Committee has been established as the body to promote the Sunflower Activities of the Tokuyama Group. Headed by the president, this committee discusses and makes

decisions on basic matters that relate to internal control, and it strives to create, develop and work under a framework for ensuring that business operations are conducted appropriately. The Corporate Social Responsibility Division acts as an office for the Sunflower Committee and is responsible for the practical implementation of the Sunflower Activities. It also ensures compliance with the reporting system for internal control that came into force in April 2008, better known as the Japanese version of the SOX Act.



### Compliance

The Tokuyama Group has adopted a basic management policy of placing an emphasis on compliance, and has included in its code of behavior fair business activities and statutory compliance. To improve the compliance framework, the Company expanded the use of the helpline in fiscal 2007 after enlarging it in the preceding fiscal year.

#### Improvement of the compliance system

The Tokuyama Code of Behavior was revised in July 2003. In March 2004, the Tokuyama Behavioral Guidelines was established and its copies were distributed to all employees. They always carry a card printed with Tokuyama's Five Conscience Clauses prescribed in the Guidelines and act with an awareness of compliance.

#### Structure for promoting compliance

Headed by the president, the Compliance Committee makes decisions on the basic concepts, companywide policies, structures and organizations related to compliance. The office for the Compliance Committee plays a central role in the implementation of activities for promoting compliance.

#### Launch and enhancement of the helpline

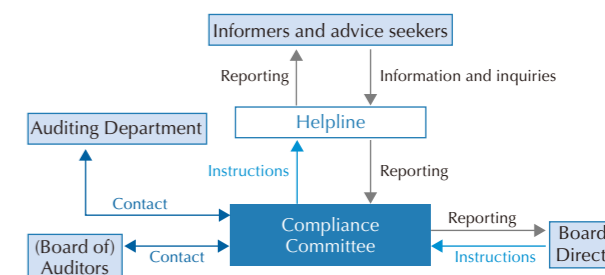
As part of its improvement of the compliance structure, Tokuyama launched a helpline as a contact for consultation in October 2003. It has since been dealing with information and inquiries from officers and employees in the Group. In fiscal 2006, the scope of access to the helpline was expanded to accept notifications and consultations from trading partners. In fiscal 2007, the coverage of the helpline was further expanded as part of the ongoing system upgrades. It is now possible for the family members of employees to contact the helpline to report or seek advice.

We continue to develop and enhance the helpline system. For example, an external contact for consultation has been established in addition to the existing helpline.

### Tokuyama's Compliance Vision



### Outline of the Compliance System



### Tokuyama's Five Conscience Clauses

- Tokuyama's Five Conscience Clauses**  
Our behavior shall
- 1 Comply with the laws, regulations and internal rules,
  - 2 Meet the Tokuyama Code of Behavior and the Tokuyama Behavioral Guidelines,
  - 3 Be highly regarded by customers and trading partners,
  - 4 Receive high marks from society and general consumers, and
  - 5 Be of a standard that can be spoken of with pride in front of family members and coworkers.

## The Foundation of CSR - Being a Trusted Company

In modern society, information can be a powerful tool, but it is now necessary to also see it as a threat that may undermine corporate survival if it is mishandled. With a clear understanding of this threat and the risk, we aim to implement security measures using the optimum balance of confidentiality, integrity and convenience.

### Maintaining and Improving Information Security

Tokuyama continues to actively introduce information technology as one of the drivers of business reform. We recognize that information security is of increasing importance as we become more dependent on networks in a society that has ever greater reliance on the Internet, and we have been taking steps to use and protect information properly.

In 2001, our top management at that time declared that voluntary information security initiatives would be taken with the participation of all employees. The fact that we set up the Information Security Committee in accordance with this declaration is testament to our level of awareness of this issue. The Committee has a mandate to develop and implement a comprehensive range of specific steps.

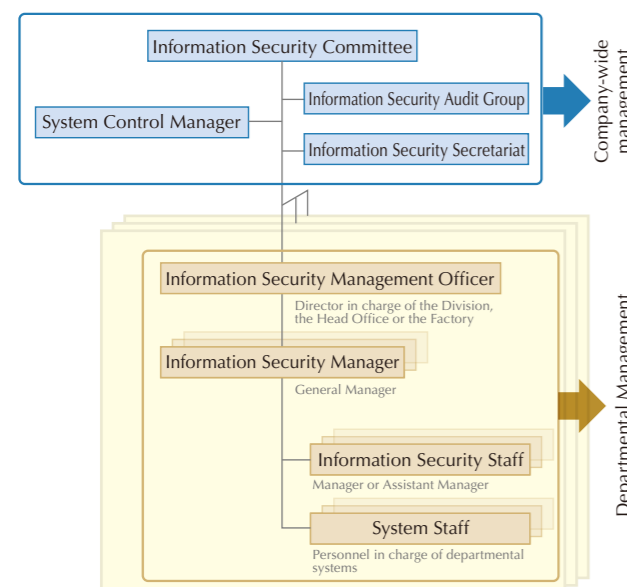
The Information Security Committee was launched with the objectives of maintaining the security of information assets consisting of information and information systems owned by the Company, and encouraging the active use of these assets. It takes the initiative in developing comprehensive security measures for information assets into Information Security Policies. It also makes decisions on basic policies on overall matters relating to information security and strives to increase awareness.

Tokuyama's individual departments separately engage in specific initiatives in accordance with the policy set out by the

Committee and with the companywide rules set out in the Information Security Policies that came into effect in March 2002. Group companies create rules based on the Information Security Policies. The Tokuyama Group is united in its commitment to improving security levels.

In addition, we have been developing hardware and software measures to prevent the spread of viruses that accompany the growing use of Internet technologies. We strictly forbid the act of opening any medium brought into the Company on a computer connected to the network, without first performing a virus check on that medium. We also have filtering in place to block access to any website that is not related to work. As a result of these protocols, no serious virus infections have been experienced over the past several years. Every employee is aware that the task of eliminating a virus infection will bring business activities to a standstill and that there would be a serious impact on customer satisfaction. We are proud that the effectiveness of the security measures is supported by this sense of crisis and by our customer-oriented commitment. In the Internet age, however, it is impossible to attain absolute or permanent security. We will diligently continue with our efforts without placing undue confidence in the existing measures.

### Information Security Management Structure



### Furthering the Protection of Personal Information

Tokuyama regards the protection of personal information as a symbol of the Company's spirit of valuing individuals and as a key obligation in meeting its social responsibility. Based on this commitment, Tokuyama has created a structure for enhancing the level protection. With the enactment of the Personal Information Protection Law in April 2005, we published our Personal Information Protection Policy on the Company's website. We also established the Personal Information Protection Promotion Committee and its office, and the section to contact for inquiries from people inside and outside the Company. The head of the Committee has been appointed general manager in this area.

The promotion structure extends to every part of the Company. At each department, a Personal Information Protection Management Officer is appointed to ensure the sound management and operation of personal information and to raise awareness among all employees. We also conduct awareness-raising activities, such as Intranet-based education, and regular inspection tours and audits of workplaces to ensure that all our officers and employees are continually paying attention to the importance of personal information in their activities.

## RC Promotion Structure and Operation of Management Systems

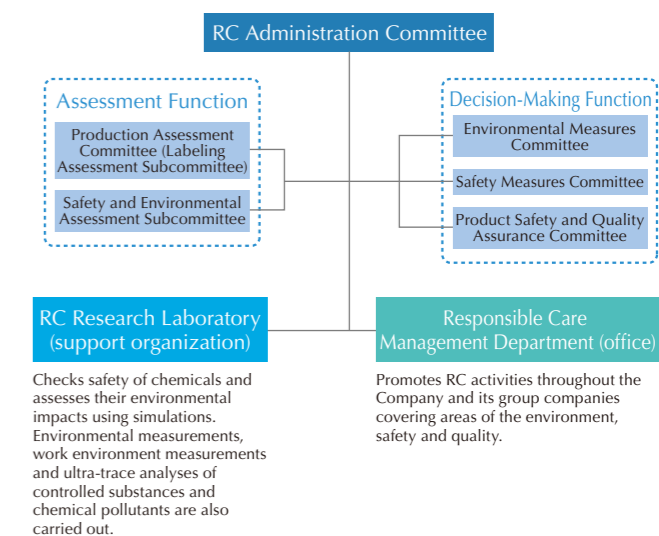
Tokuyama's CSR activities center on Responsible Care (RC) activities. A companywide promotion structure has been created to soundly operate different management systems. In this way we are continually improving our environmental, safety, production safety and quality management systems.

### RC Promotion System

Chaired by the President and consisting of the Board of Directors, the RC Administration Committee is Tokuyama's top decision-making body in relation to its RC activities. It deliberates and approves companywide policies and other environmental, safety and quality measures. Under this Committee, there are a number of subordinate bodies, including the Environmental Measures Committee, the Safety Measures Committee, the Products Safety and Quality Assurance Committee and the Products Assessment Committee. They study specific action plans and conduct product safety assessments. The Directors responsible for environmental, safety and quality matters throughout the whole company work as the leaders of these committees, with the members consisting of the Heads of the management divisions.

**RC activities:** Responsible Care 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. RC also refers to publishing the results of the activities and engaging in dialogs and communication with society. RC 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 101 corporate members as of April 1, 2008, Tokuyama being one of the founding members. We actively work on RC activities as the basis of our environmental management and CSR activities.

### RC Promotion System



### 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 are promoting *Environmental Management*, a management policy that emphasizes the environment, in all of our business activities, including development, manufacturing and sales.

#### Action Objectives

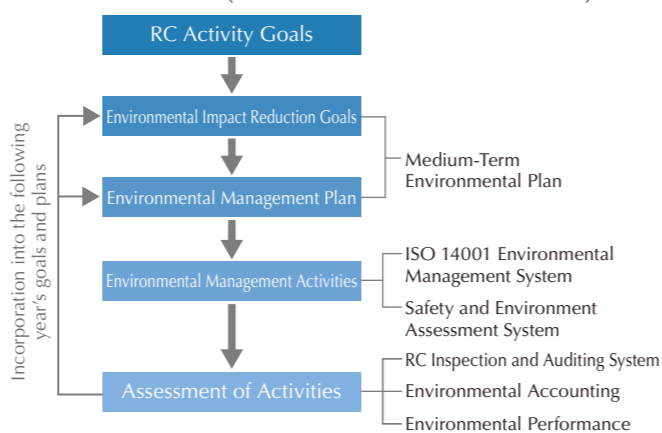
- Promote environmental protection**
  - Implement an ISO14001-based Environmental Management System and reduce the burden on the environment.
- Observe the laws and regulations**
  - Observe international rules, local laws and regulations and industrial standards.
  - Thoroughly implement internal export control rules.
- Promote energy conservation and curb global warming**
  - Achieve the lowest unit energy consumption in the industry for each product.
- Promote resource recycling and work toward reduction and the proper management of waste materials**
  - Promote material recycling and the thermal recycling of resources.
  - Work toward achieving a paperless office.
- Promote process safety, disaster prevention and occupational health and safety**
  - Aim for zero accidents and disasters based on the principles of safety self-management and self-responsibility.
  - Achieve a comfortable work environment and protect people's safety and health.
- Ensure strict product safety standards**
  - Offer environmentally friendly products that can be used with safety.
  - Provide clear information on how to use products and what care to take.
- Deepen the relationship of trust with society**
  - Publicly disclose information on the Company's activities concerning environmental protection, process safety, occupational health and safety and chemical product safety.
  - Actively engage in dialogue with the local communities.

## Evaluation and Management System for RC Activities

Tokuyama adopts a three-year plan in the area of responsible care and determines its policies and targets for separate fiscal years to achieving the plan. Under these policies, the individual divisions create specific plans and engage in their activities. The results of the activities are assessed at the end of the fiscal year so that the plans for the following fiscal year will reflect the findings.

Fiscal year 2007 was the final fiscal year of the previous three-year plan. After conducting a review to identify the continuous improvements achieved and the problems encountered, the Company formulated a new Three-Year Plan starting in fiscal 2008 and has embarked on the activities it included.

### Evaluation and Management System for RC Activities (Environmental Preservation)



## Operation of Management Systems

### ISO 14001 Environmental Management System

The Tokuyama and Kashima Factories have already acquired ISO 14001 certification. ISO 14001 is an international standard for environmental management systems. In line with the company-wide 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 company headquarters, branch offices and research laboratories, activities are underway based on their respective policies and goals set out in response to their scales, 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 that covers its principal products. 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 launched occupational health and safety management systems at individual factories and offices. In fiscal 2005, the Tokuyama Factory upgraded its system into a 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 Environment Assessment

Prior to installing, expanding or modifying any facility, we assess safety and the environment. 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 aiming to ensure that our facilities are safe, easy to operate, easy to maintain and accident-free. 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 environmentally 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 product delivery to the market. 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, operation manuals, material safety data sheets (MSDSs)\*1 and other types of labeling contain no defects in relation to the instructions and/or warnings and that there are no inappropriate expressions.

## Education and Training

Employee education and training covering the responsible care activities are provided for each separate hierarchical group. Practical education and training in relation to environmental

management, safety management, occupational health and safety and quality management are offered through actual management activities.

## Auditing Systems

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

### Safety and Environment Audit

Tokuyama conducts this audit for the operation safety and environment 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 Environmental and Safety Measures Committee, and conducts audits of all factories and offices, authorized inspection organizations under the High Pressure Gas Safety Law, logistics departments and the Health Management Center. The results of the audits are developed into reports and distributed to all departments concerned. The results are also presented to the president.

### Third Party Auditing

Tokuyama undergoes ISO 9001 and ISO 14001 examinations conducted by accreditation organizations.



Examination for maintenance of the ISO 9001 certification at the Tokuyama Factory on April 16-18, 2008

### Internal Auditing

Tokuyama conducts out internal auditing 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 the planned actions and the status of system operations are audited. If a deficiency is found, it is identified and corrective actions are instituted.

### VOICE



Toshiyuki Tamano  
Internal Auditor  
Manager  
CF-10 Dept.  
Research &  
Development Div.

Under the slogan of conducting more stringent auditing than that conducted by external organizations

In the internal auditing concerning quality ISO 9001, we carefully scrutinize the key audit items determined for the year as well as the status of other management activities in compliance with the ISO requirements. In auditing our own operations, we face several difficulties. For example, we are tempted to give a positive rating when it is difficult to determine whether an ISO requirement has been satisfied. If we include any negative remarks, the parties being audited may experience feelings of rejection. However, we conduct the audit under the slogan of making the internal audits more strict than auditing performed by external organizations. The auditors work hard in the hope that our internal auditing will help improve our level of compliance with the ISO standard.

## Fiscal 2007 RC Activities – Priority Issues and Performance

Segment	Priority issues	Performance	Related pages
Management	- Review by top management	- RC Administration Committee - Safety and Environment Audit	P18~20
Environmental conservation	- Reduction in environmental impact (air, water quality, etc.) - Reduction in the emission of PRTR substances and hazardous air pollutants - Energy conservation - Waste recycling	- Reduction of the emission of SOx, NOx, soot, dust, etc. - Promotion of energy conservation - Facilitation of the use of waste as raw cement materials and fuels - Green procurement of office supplies and lighting equipment - Unfailing operation of the environmental management system	P37 P35 P11~12 P29 P18~20
Process safety	- Elimination of accidents - Promotion of risk management - Promotion of independent safety management	- Sound operation of the safety management system - Renewal of the license for two-year continuous operation of boilers and Type I pressure vessels - Safety education and auditing of the providers of contracted logistics	P30~32 P30~32 P23
Occupational health and safety	- Elimination of disasters	- Efforts to prolong the disaster-free period - Promotion of risk assessment	P30~32
Chemical product safety	- Securing of product safety	- Implementation of product assessment and labeling assessment - MSDS preparation and research for new materials	P21~22
Cultivation of a relationship of trust with society and the local communities	- Participation in community activities - Harmonious coexistence with society and the local communities	- Participation in community volunteer activities - Dialog meetings on RC activities with local communities (on a community-by-community and factory-by-factory or office-by-office basis) - Organization of factory tours	P24~26
Promotion of RC programs targeting group companies	- Dissemination of RC activities	- Safety and environmental inspection - Encouragement of ISO certification acquisition - Sharing of RC-related information	P43~44

\*1 A material safety data sheet (MSDS) 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 suchlike.

## Relationships with Customers

Based on implementation of the ISO 9001 quality management system, Tokuyama's quality assurance activities place first priority on the customer. The safety management of chemical substances is rigidly instituted at all stages of the production process ranging from research and development to disposal and even including transportation.

## Satisfaction and Security – Quality Assurance System

As a company that is dedicated to its customers and that is always preferred by customers, Tokuyama places first priority on supplying customers with premium-grade products and services to meet their needs and to reassure them about their use.

We engage in quality management and quality assurance activities under the ISO 9001 quality management system. The

system covers the entire Company, including branch offices, sales personnel and research groups, thereby ensuring a quick response to customers' complaints and requests in every case. The information on complaints and requests is classified by division and stored on the groupware portal so that it can be shared.

## Comprehensive Safety Management of Chemicals

### Data Acquisition and Analysis on the Safety of Chemical Substances

Tokuyama collects and organizes safety data covering chemical substances so that the safety of the chemicals can be assessed. The data collected and organized is used to provide safety data on products and waste.

We are working to gain information on the hazards and toxicity of all chemical substances to be newly used, manufactured and discarded by means of product assessment, waste surveys and the analyses of new materials.

### Risk Assessment and the Management of Chemicals

To eliminate any pollution to the environment, we monitor the concentration of chemicals in effluents and gas emissions.

In addition, we simulate the distribution of the concentration of chemicals and analyze in detail their behavior. Their risks are evaluated after combining the data on concentration and the safety data. The resulting assessment data are used to improve equipment safety measures and the manner of handling chemicals as well as for the education of those who deal with chemicals. They also serve to increase product safety and to provide customers with accurate information.

### Compliance with GHS

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS)\*1 refers to a system promoted by the United Nations under which chemicals are sorted by the type and level of hazard and toxicity in accordance with internationally standardized rules to provide labels and safety data sheets that can be understood at a glance.

In fiscal 2007, the promotion of GHS was defined as a quality management goal. We work to provide GHS-compliant labeling and MSDS by classifying according to GHS the chemicals that fall under the expanded scope of the three laws specified below.

Chemicals that are subject to the three laws refer to the poisonous and deleterious substances controlled by the

Poisonous and Deleterious Substances Control Law, those subject to notification under the Industrial Safety and Health Law and designated substances under the Law Concerning Reporting, etc. of the Release of Specific Chemical Substances to the Environment and Promotion of the Improvement of Their Management.

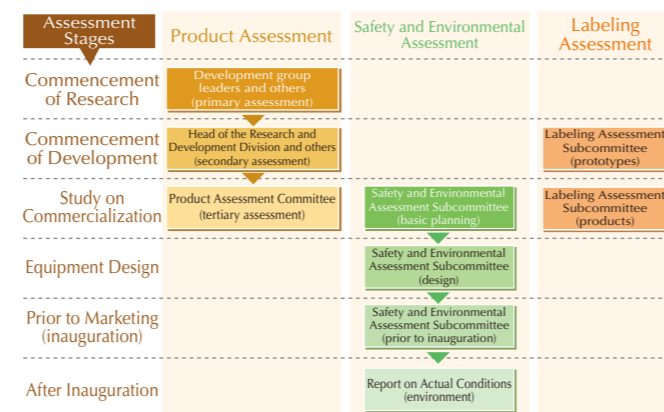
### Assessment of Products and Labeling

Tokuyama assesses the safety of both the chemicals and equipment units that it manufactures, in every stage from research and development through to commercialization. We made 56 assessments of this kind in fiscal 2007.

We also conduct labeling assessments for our catalogues, MSDSs and other technical documents. The appropriateness and legality of the representations on product labeling and packaging, prototypes and sample products are examined and any inappropriate representations are corrected.

In fiscal 2007, we conducted 315 labeling assessments.

## Process Flow in the Assessment Structure for Ensuring Safety and Environmental Conservation



### Provision of Information on Chemical Products

Tokuyama offers MSDSs for all its products and prototypes to its customers and distribution agents. MSDSs have been prepared for around 560 products. In particular, for the 33 products that are transported in large quantities and heavily used by our customers, MSDSs are always made available on the Company's website.

To deal with any problems in transit, we have created **Yellow Cards**\*2 and each of our drivers carries them. They include information on immediate measures to be taken in case of emergency. MSDSs and Yellow Cards for individual products are published on our Intranet to ensure the sharing of safety information.

### Safety Management of Waste

Waste is handled in the same way as our products. We prepare MSDSs for waste and distribute them to waste disposal operators and distribution agents to ensure safety in handling and transportation. Particularly in the case of highly hazardous waste, Yellow Cards have been created to ensure that every driver carries them and that they can deal with any problem during transportation.

We have so far created MSDSs for 73 types of waste and Yellow Cards for 41 types of waste.

## EH&S\*3 Activities concerning Tokuyama's Products

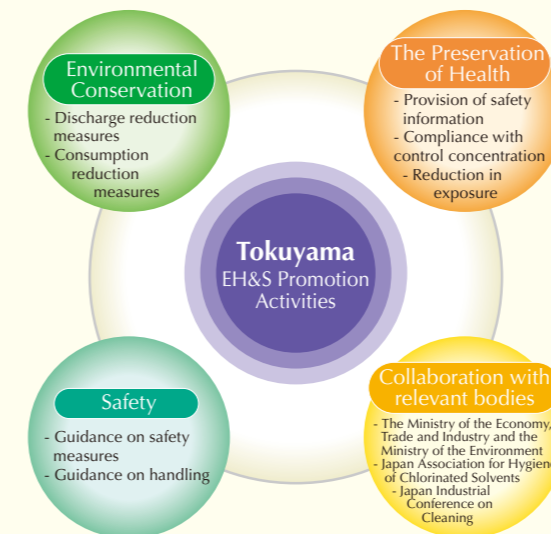
In step with its technological orientation, the Tokuyama Group is committed to protecting public health and safety and to protecting the environment as a global enterprise that contributes to society.

As part of its responsible care activities, the IC Chemicals Department embarked on actively providing users with guidance concerning the proper use of Tokuyama products.

We launched a project team that supports this activity, called the EH&S Promotion Team. It provides information on the environment,

and on the health and safety to users of Metaclene®, our chlorinated solvent product (dichloromethane) and other products.

Dichloromethane is one of the volatile organic compounds that has recently been subject to discharge control. We gather information on conditions and equipment maintenance and on the management status of individual users to provide recommendations on appropriate use.



### VOICE



Masaaki Nakashima  
Assistant Manager  
Development Dept.  
Advanced Materials  
Business Div.

**Aiming to win trust from customers by offering EH&S information and by striving to raise awareness concerning proper use**

Thirty years have elapsed since Metaclene® was developed as a chlorinated agent for the cleaning of metal. As the public is nowadays increasingly conscious of the environment, we often hear comments based on misapprehension and unsubstantiated rumors resulting from the emphasis placed on the toxicity of chlorinated cleaning agents. For example, some say that Metaclene® cannot be used after obtaining ISO 14001 certification while others say that the use of Metaclene® will be identified in the future as the source of problems. The environmental impact of this particular product can be reduced by providing customers with advice on proper use on the basis of technologies and experience accumulated over time. In addition, it is

a cleaning agent that features superior economic efficiency. At the moment, we are positively engaged in EH&S activities aimed at improving the work environment and slashing the amount of discharge so that our customers can continue to use the products for a long time. We will work hard in the future together with our customers to enhance their operating environment and to reduce the discharge volume.

\*1 GHS refers to the global standard system for the classification and labelling of chemicals.

\*2 A Yellow Card is a commonly used name for an emergency notification card containing information on the immediate action to be taken by the driver, nearby operators, firefighters and police officers in the event of any accident involving a particular chemical substance during physical distribution.

\*3 EH&S stands for environmental health and safety.

## Promotion of Safety and Environmental Management in the Distribution Process

### Guidance and Education on Safety Management to Contracted Logistics Companies

At different locations, Tokuyama organizes periodic safety meetings with its logistics subcontractors throughout the country that it commissions to deal with product transportation. We subject these companies to safety inspections with a view to improving their level of distribution management. They represent part of our positive efforts toward the horizontal expansion of accident reporting and measures to prevent accidents. Within the premises of our Tokuyama Factory, our safety specialists regularly inspect loading terminals and conduct visits and provide guidance aboard freight vessels in cooperation with the logistics companies to increase safety awareness.

We also have a range of emergency measures in place. For example, truck drivers are required to carry yellow cards printed with emergency measures and their trucks must be equipped with appropriate emergency tools so that the necessary action can be appropriately and immediately taken whenever an incident occurs during land transportation. We have also constructed an emergency communication network and associated frameworks. We conduct emergency drills to train ourselves to prepare for the initial action in the case of an accident.



The emergency drill in the Osaka district on October 6, 2007

### Risk Assessment

Before hazardous materials are transported, we conduct risk assessments to verify the safety level of the mode of transportation, the trucking route and the emergency measures to be taken in the event of an accident. If anything that presents a high level of risk is found, it is remedied methodically. Whenever any new logistics facility is constructed or expanded inside or outside a factory, a facility safety assessment is conducted to assess the risk in the phase of facility design.

The Company continues with efforts to enhance the conditions at users' premises, such as remediation of defective facilities at the delivery destination. In addition, we work unflinchingly to ensure full compliance with the amended Law for the Prevention of Marine Pollution and Sea Disasters. For instance, we ensure that the Emergency Action Manual for the Prevention of Hazardous Liquid Contamination always available at relevant ground facilities.

### Crisis Management System

We have established emergency response criteria to deal with potential crises in logistics operations. The equipment and materials necessary for disaster prevention are always ready for use.

In the Shunan, Kanto and Kansai districts, we have established a mutual disaster assistance system in cooperation with related logistics operators. The same system has recently been established in the Chubu district as well.

We are encouraging our contracted freight companies to equip their trucks with global positioning systems (GPS).

### Environmental Preservation Measures and Energy Conservation in Transportation

Together with truck operators, Tokuyama is making efforts to introduce vehicles that are compliant with the emission regulations, as well as vehicles with high fuel efficiency and devices that assist in environmentally friendly driving, such as new digital tachographs.

Following the amendment to the Law Concerning the Rational Use of Energy, we are actively making efforts to conserve energy as a specified cargo owner. On a ton-kilometer basis, we have reached a modal shift ratio\*1 of 94%, chiefly with marine transport.

## Relationships with Communities and Society

Tokuyama has been engaged in a broad array of activities directed at making a social contribution. They include financial support for the development of science and technology and assistance to facilitate the sound growth of our children. In addition, we hold local RC dialogues to communicate with local residents.

## Working on Local RC Dialogues

Tokuyama holds a community dialogue every year. This is a corporate briefing on RC activities given to local communities.

On August 21, 2007, Tokuyama held the Fiscal 2007 Local RC Dialogues at the Tokuyama Factory. This event is organized independently by the Tokuyama Factory each year in collaboration with the Shunan City Government for neighboring community associations, and is aimed at achieving greater understanding of the Factory's environmental and safety efforts. The meeting last year was the fourth such event and the attendees consisted of about 40 participants,

including the chairpersons of community associations that neighbor the Factory. The dialogue included a briefing on the Factory's environmental, safety and security efforts, a factory tour and an exchange of information. The participants exhibited a great interest in environment and safety issues, and commented that the dialogue and the factory tour reassured them and gave them a good insight into Tokuyama's sincerity.

**Number of Participants** 37, including chairpersons of community associations around the Factory (Seven of them participated in the community dialogue for the second time.)

**Proceedings**

- ① Briefing (37 participants)
  - ① Environment in the city of Shunan
  - ② Outline of the Tokuyama Factory
  - ③ Efforts for environmental preservation, safety and disaster prevention
- ② Tokuyama Factory tour (31 participants)
  - ① Tokuyama, Nanyo and Higashi plants
  - ② Yamaguchi Eco-Tech Corporation

**Findings of the questionnaire conducted on the day**

< Community dialogue on the day >

a) Presentation	Comprehensible explanations 44%	Roughly understood 56%
b) Screen and audio	Good 100%	
c) Time allotment for explanations	Good 80%	Poor 20%
d) Reception and others	Good 100%	

**Comments**

- The event gave me a reasonable insight into environmental issues.
- Both the city government and the company address environmental problems. I realize that every single member of the public must increase their own awareness.

< Factory tour >

a) Explanations	Comprehensible explanations 47%	Roughly understood 53%
b) Other facilities that the respondents wish to see	① Electrolysis plant ② SE plant ③ North part of the Higashi plant ④ Inside the plant	

**Comments**

- I visited Yamaguchi Eco-Tech and deepen my understanding of the importance of refuse separation. I hope the tour will be open to elementary and junior high schoolchildren.
- I wish that the tour would last longer.

The dialogue with local communities helped us better understand their views and requests.  
We will study their valuable comments to improve our corporate activities.

RC Community Dialogue Held at the Tokuyama Factory

## Tokuyama Science Foundation

Tokuyama Science Foundation was established in 1988 with the aim of creating new fields of science, as part of the project for commemorating the Company's 70th anniversary. Each year, the Foundation grants research subsidies to young researchers in the area of new materials studies. It runs various support programs, including *International Exchange Assistance*, *International Symposium Assistance* and *Science and Technology Awareness*

**Building Assistance.** As of March 2008, the Foundation had financially supported a grand total of 283 research projects and provided a total of 550 million yen in assistance.

Year 2008 marks the 20th anniversary of the establishment of this Foundation. On December 4 and 5, it will be holding a ceremony to commemorate the occasion and to present its achievements.

\*1 The modal shift ratio is the ratio of freight or passengers transported by alternative means, specifically rail and ship in substitution for automobile and aircraft.

## Internship for High School Students – A Japanese-Style Dual System

In June 2007, two students from Tokuyama Commercial High School participated in a 16-day internship program at the Company. The program constitutes part of the Japanese version of the Dual System organized by the Ministry of Health, Labour and Welfare and the Ministry of Education, Culture, Sports, Science and Technology. The same program was run last year as well.

### VOICE

Aya Ito  
A third-year student,  
Information and  
Business Course  
Tokuyama Commercial  
High School

**“I have learned the importance of communication.”**

The program gave me some practical experience of doing office work and made me feel more like taking a clerical position in the future. During the internship period, I performed various duties. I have learned that the clerical section has many different tasks. The practical experience also taught me the importance of smiling and greeting others. I think that greetings are part of communications in our society and a key part of connecting with people. I will make the most of this lesson in my life in future.



## A Concert of the 12 Girls Band as a Project Commemorating the 90th Anniversary

On February 16, 2008, Tokuyama marked the 90th anniversary of its establishment. To commemorate the occasion, we invited the 12 Girls Band from China and organized a special concert for the locals on April 5 in Shunan bunkakaikan. The event attracted some 1700 visitors, who derived utmost enjoyment from the great performance of the 12 Girls Band.



The special concert to commemorate the 90th anniversary of establishment

## Donation of Previous Uniforms to Nepal

As we did in 2006, we donated to Nepali children our old-style uniforms for female employees, which became superseded after we changed the design. This program was originally suggested by one of our female employees as a means of making effective use of the resources after the uniform change. In 2007, we donated white blouses and vests that were formerly worn at the head office and branch offices to Balwapati Primary and Secondary School in Nagarkot, which is situated at an altitude of 2400 meters.



Schoolchildren at Balwapati Primary and Secondary School

## The Fourth Community Briefing on Responsible Care in the Shunan District

On November 13, 2007, the Shunan District Environmental Preservation Council organized the Fourth Community Briefing on Responsible Care in the Shunan District at a meeting house called Pipi 510 in Shunan. With around 180 participants, including those from community associations, the government sector and the area of education, it had a keynote speech delivered by the Environment and Life Department of the Yamaguchi Prefectural Government and Japan Chemical Industry Association (JCIA), followed by a report on the environment of Shunan from the Environment and Life Department of the Shunan City Government as well as presentations on RC activities from three enterprises. Tokuyama made a presentation entitled the Environmental Preservation of the Enterprises in the Shunan Industrial Complex.

The Fourth Community Briefing was the first such event that included a roundtable dialogue joined by governmental officials, local residents and businesses in the Shunan Industrial Complex. Opinions were actively exchanged on the problem of noise etc. The event provided an opportunity to engage in communication with the local community.



The Community Briefing in Progress

## Mikage Bunko

In 2008, Tokuyama ran the 31st Mikage Bunko program. As part of our CSR activities, this program donates book coupons to elementary schools and junior high schools in Shunan, Yamaguchi Prefecture. On February 8, Tokuyama's personnel visited the mayor of Shunan and handed him the contribution for 51 elementary and junior high schools in the city. To commemorate its 90th anniversary, Tokuyama also donated bookracks this year.

## Exchange with Neighboring Communities

### Exchange among People, the Forest and Water – Participation in Forest Volunteer Activities

The Project for Promoting the Development of Water Sources in Collaboration with Enterprises - *Machi to Mori to Mizu no Koryukai* (meaning “the Exchange among People, the Forests and Water”) took place under the auspices of the Shunan Agriculture and Forestry Office in the municipally owned forest at Iinoyama in the city of Shunan. This volunteer activity is aimed at ensuring the stable supply of good-quality water through the development of a green forest that has a high water-retaining capacity like a dam. This includes weeding out grass that interferes with growth of trees, thinning of trees, pruning branches and planting broadleaf trees. One hundred and forty staff members from Tokuyama participated in the activity. Following the guidance of a forestry instructor certified by the Yamaguchi Prefectural Government, the participants cut some undergrowth, cut the vegetation to make some improvements and pruned the branches of Japanese cedars.



Hard at work at the Forest Volunteer Activities

### VOICE



Yuki Hajima  
Personnel Dept.  
(Tokuyama)  
General & Personnel  
Affairs Div.

### Realizing the importance of actively tackling environmental issues

I took part in the cutting and pruning activities at Iinoyama in Shunan on October 20, 2007. The work was in fact very challenging. Especially in pruning, it is necessary to saw off the branches straight at the base. I was told that if they were not cut straight the tree would grow crooked. It was very difficult to do the work on poor footing. After only two hours of work, the forest looked much nicer than it did before. I realized that it is possible to generate an indefinitely large capacity by combining the small capacities of each individual and that it is significant for individuals to actively address environmental issues. It was a good experience that has enabled me to elevate my awareness.

## Exhibition of Environmental Events

### Yamaguchi Iki-Iki Eco Fair Wai Wai Monozukuri Kagayaki Festa

On October 20 to 21, 2007, the Yamaguchi Prefectural Government organized an environmental event entitled *Yamaguchi Iki Iki Eco Fair* at Yamaguchi Kirara Expo Memorial Park in Ajsu, Yamaguchi City. On October 27, the Shunan City Government held a festival called *Wai Wai Monozukuri Kagayaki Festa* at Pipi 510. Both events attracted a large number of visitors.

Tokuyama is a manufacturer of polycrystalline silicon for solar batteries and is engaged in the development of electrolyte membranes that are central to fuel cells. At these events, we ran an exhibition booth to explain our efforts to combat global warming and to reduce energy consumption. The booth provided the parents and children who visited with the opportunity of building miniature solar cars and of trying their hand at a quiz. There was a long line of people waiting to race the solar cars they created in the exhibition. The children who participated in the race were excited to see their cars racing toward the finish line.



Environment quiz



Solar car race

## From Responsible Care Report to CSR Report

Tokuyama published its Responsible Care Report from 1997 to 2006. In 2007, it was revamped to become the CSR Report. We are working to enhance the coverage of the report to provide many different stakeholders with information on our attitudes towards society, the environment, health and safety as well as with an annual summary of our activities. In addition, Tokuyama's website has sections that feature environmental and social contributions, showcasing the Company's environmental and social activities.



URL <http://www.tokuyama.co.jp/eng/enviro/index.html>

## Relationships with Employees

Tokuyama is committed to improving the working environment to ensure that individual employees can exhibit their capabilities and engage in their everyday duties with motivation. In fiscal 2007, the Skills Education and Training Center commenced full-scale operations. The Company endeavored to develop human resources and worked more actively on improving their mental and physical health.

### Addressing the Development of Human Resources

#### Capitalizing on the Skills Education and Training Center

Due to the large-scale retirement of the baby-boomer generation, the manufacturing shop floor now faces two challenges. One is to pass on the skills from experienced workers to the younger generation and the other is to train new operators from the early stages. To meet these challenges, Tokuyama launched the Skills Education and Training Center in April 2007.

Under the slogan, *Experience, Feel and Learn*, it offers practical training for acquiring the basic knowledge and operations required by new operators through the use of an education plant and cutaway models of different devices as well as safety education based on dangerous events such as an object falling from above, an object becoming airborne, exposure to liquids and objects becoming snagged on each other or in machinery.

In fiscal 2007, the Center offered technical training to some 90 new employees and provided education concerning dangerous events to approximately 120 technical staff members in their second and third years of service. These programs are highly regarded by workers in manufacturing. They comment that the trainees can now be progress smoothly to specialist education at the workplace after basic skills training and safety education based on the *Experience, Feel and Learn* principle and that their safety awareness is considerably improved by the education.

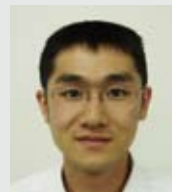
In the first half of fiscal 2008 as well, we will be offering new employee training to 100 newcomers and additionally offering training in dangerous events to new employees in our group companies.

In the second half, we will be launching skill training for young personnel in their third year of service or later.



An experiment involving objects becoming caught in machinery

#### VOICE

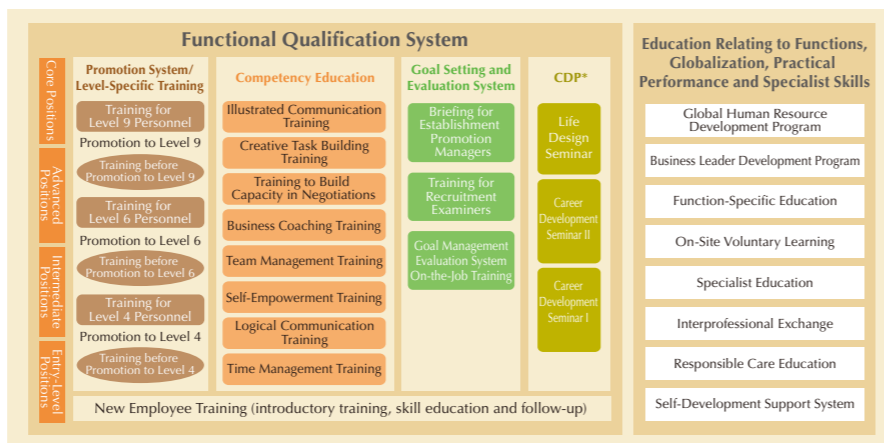


Sho Uchida  
Technical Sect.  
Manufacturing Dept.  
Si Business Div.

#### Making the most of what I experienced, felt and learned at the training center in my future work

At the Skills Education and Training Center, I underwent one month of training on plant operation and safety. The training provided trainees with the opportunity to see the actual plant and equipment first hand. The trainees exchanged opinions as we considered the mechanism, which helped us to deepen our understanding. The experience of dangerous events such as exposure to liquid and objects being snagged in machinery raised our awareness of the latent risk in the Factory and the need to wear protective attire. I will apply what I have experienced, felt and learned through this training to my future work.

#### Human Resource Development System (Fiscal 2007)



\* Carrier Development Program

#### Expanding the Human Resource Development System to the Rest of the Group

Centering on personnel and the organization, Tokuyama's Human Resource Development System is designed to strengthen leadership development and managerial capability. In operating this system, we secure a link from level-specific off-the-job development (Off-JD) to on-the-job development (OJD). This approach is so highly regarded that we won the 19th JMA HRD Award for Excellence in fiscal 2006. This award is presented by the Management Research Institute of the Japan Management Association (JMA).

At the same time, we are working to enhance morale throughout the entire Tokuyama Group towards human resource development. In November 2007, we had the Group's first-ever Human Resource Development Meeting (2007) to discuss the main topic for developing human resources that increase practical abilities. Fifty-four people from 15 companies in the Group participated, including management executives, staff members engaged in personnel affairs and human resource development, as well as front-line managers. They engaged in serious discussions concerning the optimum form that human resource management should take.

The general meeting included presentations covering outstanding examples of human resource development at Group companies. It was followed by three separate focus sessions lasting all day where there was serious debate concerning the ideal form that human resource development should take in increasing practical abilities and enhancing group management.

Human Resource Development Meeting 2007



### Personnel Management System to Energize Human Resources

#### Work-Life Balance

Tokuyama has implemented three institutional reforms, detailed below, for the purpose of supporting its employees' work-life balance and building an environment in which children, who play key roles in the next generation, are born and raised in a healthy manner. First, we extended childcare leave for an additional twelve months. This leave is now available until the child reaches the age of two. Second, we have launched a program permitting shorter working hours for employees caring for preschool children in order to help them pursue their career while engaging in childcare. Third, we have also launched a program of family care leave in consideration of the burdens that employees who provide family care must bear.

#### Trend in the Number of Employees on Childcare Leave

Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
13	9	13	3	11

#### Employment of Physically-Challenged Persons

In fiscal 2006, regrettably, Tokuyama was unable to reach the statutory rate for physically-challenged persons employment of 1.80%. Thereafter, in fiscal 2007, we actively recruited disabled jobseekers and increased the ratio to 1.93%, thereby achieving the mandatory level.

In the hope that physically-challenged employee will develop at their worksites and through business activities to contribute to society, the Tokuyama Group will maintain its stance concerning the actively employing physically-challenged persons.

#### Trend in Employment Rate of Physically-Challenged Persons

Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
1.39	1.59	1.80	1.65	1.93

#### Retired Employees Reemployment Program

Following the move to increase the age at which employee pensions begin to be paid, Tokuyama set up an retired employees reemployment program in fiscal 2001, ahead of the competitors. This program serves another objective of passing on skills in preparation for the retirement of the baby-boomer generation. In fiscal 2007, 49 employees wanted to be reemployed and Tokuyama reemployed 43 of them in various positions. They have been displaying their superior skills and expertise cultivated at the workplace.

### Promotion of Improvements to Mental and Physical Health

#### Improvements to Health through the THP

In accordance with the Guidelines for the Total Health Promotion Plan (THP) backed by the Ministry of Health, Labour and Welfare, Tokuyama set up the THP Committee. The THP Committee engages in a wide range of activities to address its priority challenges of combating lifestyle-related diseases and enhancing mental health.

Its actions against lifestyle-related diseases include individual guidance provided by industrial doctors and medical personnel on the basis of the results of regular health checkups and a small-scale health workshop conducted by visiting health management personnel at employees' workplaces.

In fiscal 2007, the THP Committee provided employees with several opportunities to think about their diet. For example, in cooperation with the company canteen as part of nutritional education, it devised a plan to serve healthy lunches that were low-sodium meals having good nutritional balance. To increase mental health, it launched the *Genki Iki Iki Tokuyama Katsudo* (the Initiative for an Energetic and Lively Tokuyama). Under this initiative, a provisional stress check was introduced using a simplified occupational stress checksheet. The check was conducted for employees at the Tokuyama Factory to confirm that the mental health check was an essential part of the efforts to alleviate stress. As a result, it was expanded in fiscal 2008 to encompass the entire company. In this was, we are taking positive action for protecting the mental and physical health of the employees.

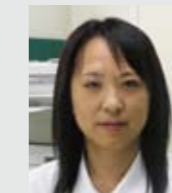
#### Promotion of Internal Recreational Activities

With the aim of stimulating communication among employees and creating a stress-free workplace that has a cheerful and lively atmosphere, Tokuyama is promoting recreational activities.

As a production center, the Tokuyama Factory traditionally provides lunchtime recreational activities. In accordance with the annual plan, the recreational staff members at individual workplaces take the initiative in actively promoting these activities.

The Tokyo head office, branch offices and factories individually arrange and organize activities that suit with their respective characteristics.

#### VOICE



Misako Ushimi  
Nurse  
Health Care Center  
General & Personnel  
Affairs Div.

#### Supporting the maintenance and improvement of health through diet and exercise

At the initiative of the Diet Group and Exercise Group, the Health Management Center is working to prevent employees from suffering lifestyle-related diseases. The Diet Group provided nutritional education in the company canteen in fiscal 2007 in an effort to direct employees' attention to their everyday diet. The Exercise Group introduced tests of physical strength at individual workplaces this year. The objective is to ensure that employees understand their own physical strength and the importance of exercise. Diet and exercise are two key pillars of the initiatives to improve health. We take these two approaches to support the maintenance and improvement of their health.

## Relationships with Shareholders

In a bid to gain the understanding and confidence of shareholders and investors, Tokuyama is working to provide information in a prompt, appropriate manner.

### Information Disclosure

To provide shareholders and investors with information, Tokuyama has opened the section *For Investors* on its website. This section offers stock information, consolidated financial data, financial reports including financial summaries, electronic public notices, securities reports, annual reports and presentations for IR meetings as well as the IR calendar.



The financial results briefing on May 13, 2008



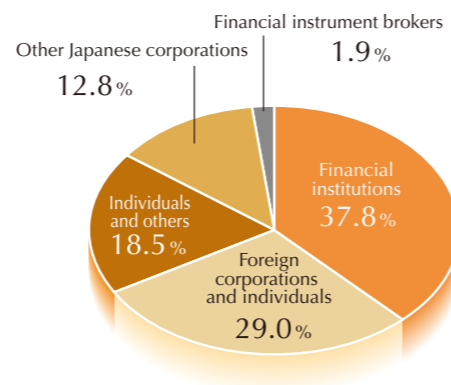
Annual Report



For Investors on Tokuyama's website

URL <http://www.tokuyama.co.jp/eng/ir/index.html>

### Composition of Shareholders (as of March 31, 2008)



## Relationships with Trading Partners

Tokuyama is committed to engaging in fair transactions with all its trading partners for building mutual trust with them and to meeting its CSR commitments in its purchasing activities.

### Fair Transactions

Maintaining good and honest partnerships with its trade partners, Tokuyama makes purchased in accordance with its basic purchasing policy, to ensure that it supplies its customers with good products backed by outstanding technologies.

#### Tokuyama's Basic Purchasing Policy

Note: The Basic Purchasing Policy does not constitute part of any agreement, nor does it indicate any offer to enter into an agreement.

##### Optimum Transactions

Tokuyama evaluates its trade partners from an overall perspective that includes quality, pricing, delivery dates, technical capabilities, credibility, safety, after-sales service, serviceability, the ability to respond to incidents, compatibility with existing equipment and business stability to choose suppliers that best suit the Company.

##### Partnership

Tokuyama aspires to be a good partner that shares with its suppliers the common goal of creating good products. To attain this goal, Tokuyama welcomes suppliers with unique proposals for creating an environment that gives new suppliers easy access to opportunities for transactions.

##### Statutory Compliance

In its purchasing activities, Tokuyama complies with the letter and with the spirit of the relevant laws and regulations. Tokuyama also requires its suppliers to comply with them and chooses suppliers that meet the requirement.

##### Promotion of Green Purchasing

Tokuyama views the Reduce-Reuse-Recycle (3R) perspective as another possible criterion for choosing suppliers to promote environmental conservation in its purchasing activities.

## 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. With the aim of preventing accidents and injuries, the Company is 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.

The Company's main factory, the Tokuyama Factory, is located very close to the residential district of the city. We understand that it is absolutely essential to ensure safe operation of the factory and we make painstaking efforts to ensure safety of the equipment and the processes. We rigidly implement and continuously upgrade the basic safety activities, including safety patrol, activities to anticipate danger, initiatives to prevent near-misses, **5S activities**<sup>\*1</sup> and the practice of checking things by pointing and speaking aloud. In addition, we actively work to detect latent sources of danger or risks and to reduce and eliminate them in an attempt to prevent accidents or disasters.

We subject our disaster prevention system to review and improvements to ensure readiness in the event of an emergency. Specifically, the system includes a structure, as well as communication, disaster control activities, materials and equipment for disaster prevention and rescue and first-aid operations.

In fiscal 2007, in an attempt to improve the resources and equipment for disaster prevention, we upgraded the system so that it was possible to transfer images from the site of the disaster. We also installed more gate security cameras and standardized the indications of automatic fire alarms. These are part of our efforts to collect accurate information and to speed up the process of being able to respond to any accident.

In addition, we conduct a range of different drills in preparation for an emergency situation. They include the general disaster drill jointly held with the public sector, departmental disaster drills, emergency drills organized in collaboration with affiliated companies and contractors and a competition of skill in controlling disasters held on the Factory's premises.

We exhibited these drills to local communities to gain their understanding and confidence concerning the Factory's safety activities.



The general disaster drill at the Tokuyama Factory on January 25, 2008

#### 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 Law and is qualified to continuously operate boilers and other equipment. We ensure appropriate operations in compliance with the accreditation requirements. We also follow the principle of conducting voluntary safety activities under our own responsibility to run the plan-do-check-act (PDCA) cycle in

safety management with complete consistency. While raising the awareness of safety among all employees, we will endeavor to prevent accidents and disasters.

We encourage the management teams for operations to engage in their voluntary safety activities. The equipment management section is working to build up its engineering expertise in ensuring safety for maintaining the stable operation of the plants.

#### Safety Audit

Tokuyama conducts audits of all its factories and offices to inspect the status of process safety, disaster prevention and occupational health and safety. If the audit identifies any nonconformance, it is specified and the necessary guidance is given to ensure corrective action. The audit results are reported to relevant departments so that they will implement remediation. The Safety Measures Committee is also informed of the results so that it can formulate an action policy for the following fiscal year on the basis of the findings.

#### Safety and Environment Assessment

When installing, modifying or adding any equipment, the head of safety calls internal experts to perform assessments at the planning stage, at the design stage and at the stage before going live. Each assessment conducts pre-emptive checks and examines any latent risks that may arise for the purpose of remediation and improvement. This ensures the safety of equipment, process and operation and prevents accidents and disasters from occurring.



Auditing at the Kashima Factory

#### Safety Performance

In fiscal 2007, Tokuyama continued with its safety activities to achieve the goal of completely eradicating on-the-job accidents that resulted in workplace absentees. The Tokuyama Factory attained this goal in terms of its employees. In April 2008, its accident-free period surpassed 5,400,000 hours to meet the requirement for certification of a Type I No-Accident Record. However, it saw two accidents in which the employees of contractors were injured and were absent from work.

The Kashima Factory has maintained its zero-accident and zero-injury status for 22 years since its inauguration. The Tsukuba Research Laboratory has also been free from accidents or disasters for 18 years since it was launched.

In fiscal 2007, we spent 600 million yen on upgrading facilities and on increasing disaster control equipment for the purpose of safety and disaster prevention. We will continue to step up our efforts to protect all workers from accidents, whether they are employed by Tokuyama or our contractors.

<sup>\*1</sup> Terminology The 5S activities are an initiative to ensure the 5S features at the workplace. The 5S refers to *Seiri* (tidy), *Seiton* (organized), *Seiketsu* (clean), *Seiso* (cleaned up) and *Shukanka* (putting these four actions into practice).

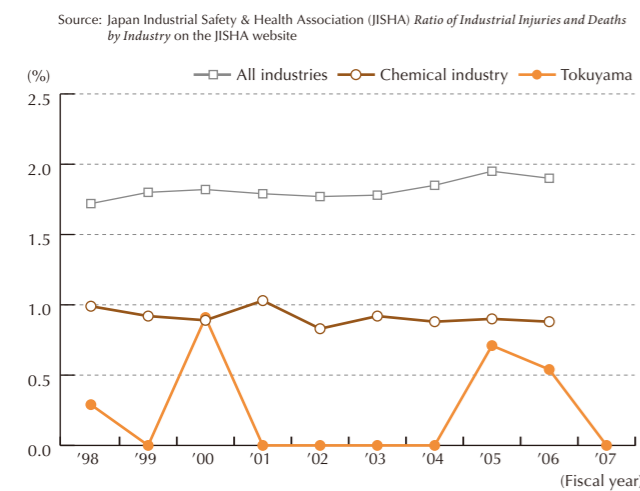


## Commitment to Occupational Health and Safety

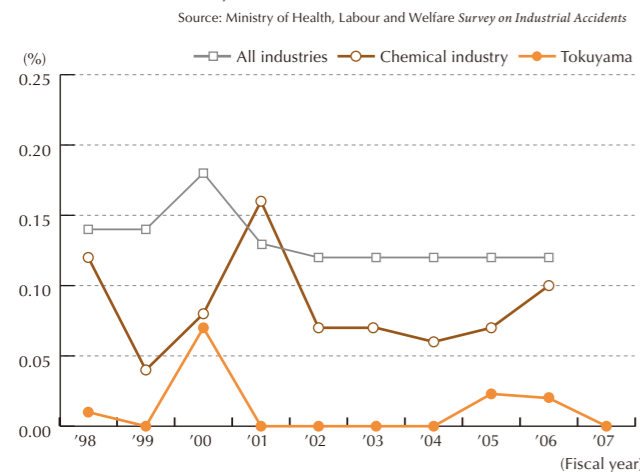
### Promoting the Safety Management System

Tokuyama has established Occupational Health and Safety Management Systems for individual factories and offices and, in fiscal 2003, put them into operation. At the Tokuyama Factory, its system was upgraded into the Safety Management System in fiscal 2005 to additionally support process safety activities. This factory continues to make improvements by performing risk assessment in terms of work, equipment and processes with a view towards completely removing potential risk factors. In fiscal 2007, the Company invested 200 million yen to enhance and strengthen occupational health and safety.

### Trend in the Rate of Injuries Resulting in Lost Work Time\*1



### Trend in Severity Rate of Accidents\*2



### Implementation of Safety and Health Activities in Concert with Contractors

Tokuyama is working to safeguard all workers at its plants from accidents and injuries in collaboration with its contractors. Specific activities include efforts to share information and raise awareness through joint safety and health meetings and their departmental equivalents with the participation of Tokuyama's employees and those of its contractors. Other activities include enhancing safety checks and management by means of safety patrols, purpose-specific safety education and workshops for increasing knowledge of the personnel and training programs to increase the level of skill.



A safety meeting held by the Company's contractors on July 2, 2007

#### VOICE



**Kazunori Kaneda**  
Assistant Manager  
Manufacturing Sect. 1  
Manufacturing Dept. 2  
Chemicals Business Div.

#### All personnel make an integrated effort to eradicate accidents and injuries

At our Second Chemicals Manufacturing Department, the safety management policy stipulates that every single member take an active part in the safety management activities. With the aim of achieving accident-free operations, the policy encourages us not to miss any risks associated with the workplace and to address "Safety by Thinking" and "Safety by Visualization." To encourage and boost safety activities, we have introduced a safety personnel system for conducting sophisticated safety activities. In the future, we will make integrated efforts to completely eradicate accidents and injuries.

### Maintaining a Favorable Working Environment

For the purposes of preventing health problems and providing a working environment that enjoys the full confidence of the personnel, Tokuyama has long been engaged in conducting continuous environmental measurements on workplaces that handle specified chemical substances and organic solvents, thereby improving working procedures and facilities. At the moment, all the worksites at every factory and office fall under **Control Category I**\*3. We impose stricter voluntary standards to stimulate improvements. The Tokuyama Factory conducts improvements to the working conditions in a broader sense through the use of occupational stress survey results. The results of the improvement are studied for the purpose of bettering workplace conditions.

Although our environmental measurements have confirmed that none of the locations where asbestos has been sprayed on the building constitute any immediate hazard, all the asbestos removal and detoxification work attained completion in fiscal 2006.

### Process Flow of Stress Relief through the Use of Occupational Stress Survey Sheets



A briefing on stress checks

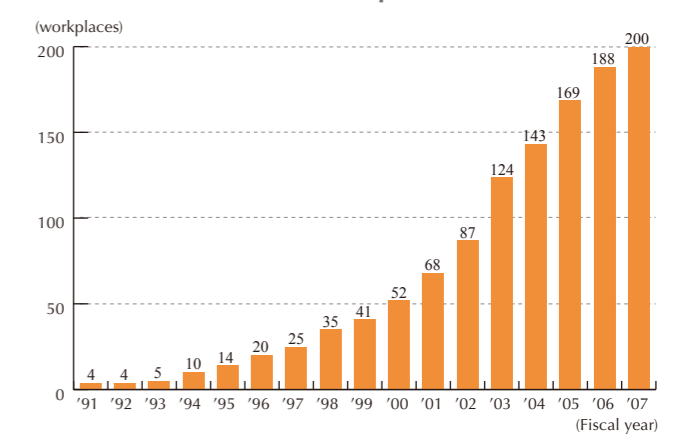
### Encouraging 5S Activities

The Tokuyama Factory introduced the 5S model workplace accreditation program in 1991 in a bid to stimulate 5S activities. Under this program, each workplace makes an application to undergo an assessment. If it is found that it meets the predetermined requirements, it is accredited as a 5S model workplace. As of the end of March 2008, a total of 200 workplaces had been accredited under this system. The 5S activities are basic to safety. As in the case of work skills, 5S activities will be passed down and intensified with the aim of achieving accident-free status.



A plate for a 5S model workplace

### Trend in the Cumulative Number of Workplaces Accredited as 5S Model Workplaces



\*1 The rate of injuries that result in lost work time refers to the number of workers forced into absence through industrial accidents per million cumulative working hours. This reflects the frequency at which industrial accidents occur.

\*2 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.

\*3 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%) of workspace units. There are three control categories, namely I, II and III. Control Category I corresponds to the most desirable condition.

# Harmony with the Environment

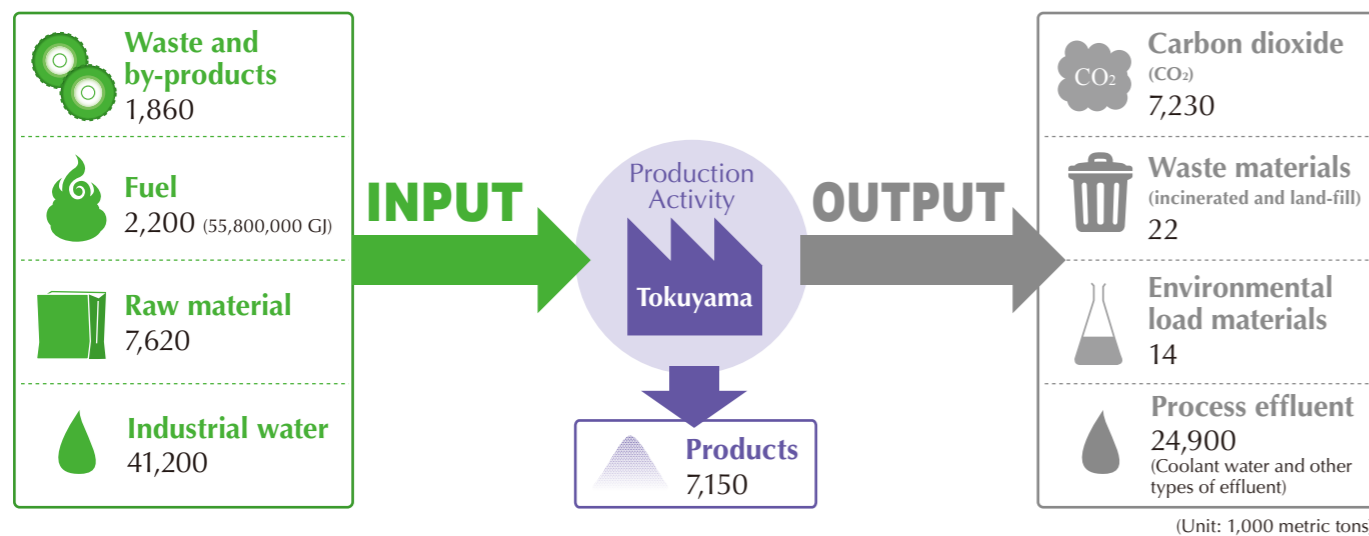
Initiatives for preserving the global environment represent a significant social responsibility that businesses are obliged to meet. Tokuyama practices *environmental management* with an emphasis on the environmental perspective in all processes of its business activities.

## Performance for Fiscal 2007

Tokuyama strives to obtain accurate data on inputs and outputs in its business activities and reduce the burden on the environment to meet its new goals. In fiscal 2007, the Company continued its initiatives to conserve energy, and improved unit energy consumption to a level that is 19.2% lower than the level of 1990. (The Company's new target for fiscal 2010: 22% reduction compared with the 1990 level.)

## Flow of Materials in the Production Activities

\* All figures represent the input and output amounts associated with Tokuyama Corporation alone in fiscal 2007.



## Results of Environmental Preservation Activities in Fiscal 2007 at the Tokuyama Factory

Segment	Items		Fiscal 2007 Target (Reference Fiscal Year: 2004)	Fiscal 2007 Result (Reference Fiscal Year: 2004)	Rating*	Fiscal 2008 Target (Reference Fiscal Year: 2007)	Fiscal 2010 Target (Reference Fiscal Year: 2007)
Environmental Impact Reduction	Atmosphere	Soot and Dust	-11%	-18%	○	±0% (from the average in the past three years)	±0% (from the average in the past three years)
		Water Quality	COD	+5% or less	+14%	×	-7%
	Nitrogen		±0%	+19%	×	±0%	±0%
	Phosphorus		±0%	-43%	○	±0%	±0%
	PRTR	PRTR	-15%	+3%	×	-24%	-50%
Hazardous Air Pollutants (VCM, EDC)		-35%	-3%	×	-36%	-38%	
Global Environment Conservation	Energy Conservation	Unit Energy Consumption Index	16.0% lower than the level in fiscal 1990	19.2% lower than the level in fiscal 1990	○	20% lower than the level in fiscal 1990	22% lower than the level in fiscal 1990
Waste Reduction	Recycling	Rate of Effective Utilization of Waste	94.0% or more	94.2%	○	94% or more	94% or more
	Zero-Emission	Zero-Emission Ratio	99.8% or more	99.9%	○	99.9% or more	99.9% or more

\*Rating: The circle refers to success in attaining of the target and the cross refers to failure to attain the target.

## Environmental Accounting

To facilitate understanding and analysis of how much is invested in and spent on environmental preservation and for thus improving the effectiveness of environmental investment, Tokuyama has been implementing environmental accounting since fiscal 2000. In fiscal 2007, our investment in the environment rose about 800 million yen from a year earlier while spending and the economic benefits each grew some 500 million yen.

## Environmental Costs

Nearly 30% of Tokuyama's environmental investments were assigned to anti-pollution measures, about 20% in global environmental preservation and the remaining approximately 50% in resource recycling. The major destinations of our environmental investments include replacement of denitration equipment, replacement of bag filters and the installation of waste recycling equipment.

### Costs of Environmental Preservation

Classification of Environmental Preservation Costs		Principal Actions	Amount Invested (JPY million)	Total Amount Spent (JPY million)
Costs in the Business Areas	Pollution Control	Replacement of denitration equipment, replacement of bag filters and installation of wastewater treatment equipment	551	3,513
	Global Environmental Conservation	Installation of waste recycling equipment	377	1,130
	Resource Recycling	Relocation of general wastewater treatment equipment	817	1,198
Upstream and Downstream Costs			0	0
Management Activity Costs		Installation of environmental analysis equipment	30	293
Research and Development Costs			21	60
Social Activity Costs		Planting in the factory premises and production of CSR Report	2	17
Costs for Environmental Damage		Contribution and management of the former mining site	0	196
Total			1,798	6,407

\* The data in the table at the right are based on *Environmental Accounting Guidelines 2002* published by the Ministry of the Environment.  
\* The figures reflect the amounts incurred at all factories and offices of Tokuyama Corporation.

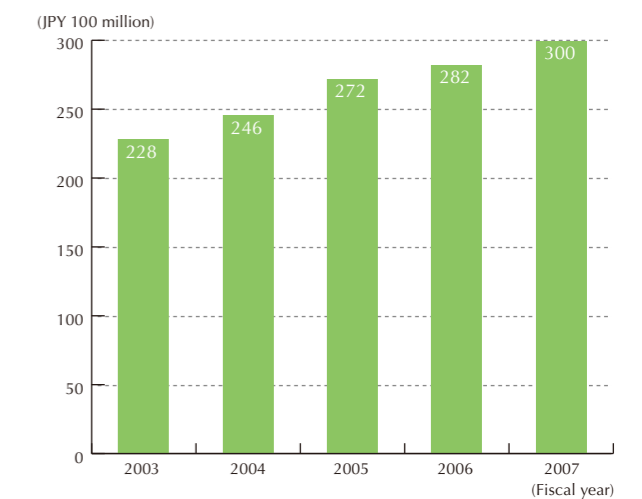
## Economic Benefits

To analyze the economic benefits, we calculate nothing but gains on the sale of valuable waste, the costs of waste treatment for reuse and the real benefits of gains on cost-cutting of fuel and energy consumption. Assumed economic benefits are not included in the estimates. In fiscal 2007, we reaped 1.9 billion yen worth of economic benefits, up by around 0.5 billion yen from the preceding fiscal year.

### Economic Benefit

Item	Material Benefits (thousand metric tons)	Economic Benefits (JPY million)	Remark
Gains on Reduction in Energy Consumption	-	162	Earned by reducing the amount of electricity and steam consumed
Gains on the Sale of Valuable Waste	91	761	Earned by selling scrap metal, waste oil, waste acid and alkali and suchlike
Gains on Waste Treatment Cost-Cutting	272	462	Waste treatment costs slashed by reusing waste
Gains on Fuel Cost-Cutting after the Reuse of Waste	272	492	
Total		1,877	

### Trend in Cumulative Total Environmental Investments (since fiscal 1990)



## Commitment to the Prevention of Global Warming

Prevention of global warming is a key challenge to be addressed by corporate citizens. Tokuyama makes constant achievements through the conservation of energy in business activities and supports the conservation of energy in employee households.

### Promotion of Energy Conservation

Tokuyama consumes a huge amount of energy in the processes of 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 the cement production process.

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 at least 99% of our energy consumption. It finished replacing the No. 7 Unit in its private power plant in fiscal 2007. After introducing circulating fluidized bed combustion (CFBC) boilers, the new unit burns waste tires and biomass alternative to coal by combining them with coal. Moreover, it has introduced a steam-extraction turbine to improve energy efficiency.

As a result of our energy conservation activities conducted in the past, the unit energy consumption in fiscal 2007 was 19.2% lower than the 1990 level. This means that we met our fiscal 2010 target of achieving a 17.5% reduction in the third straight year.

In the future, the Company will be stepping up efforts to reach a new target of lowering the unit energy consumption to 22% below the 1990 level by fiscal 2010.

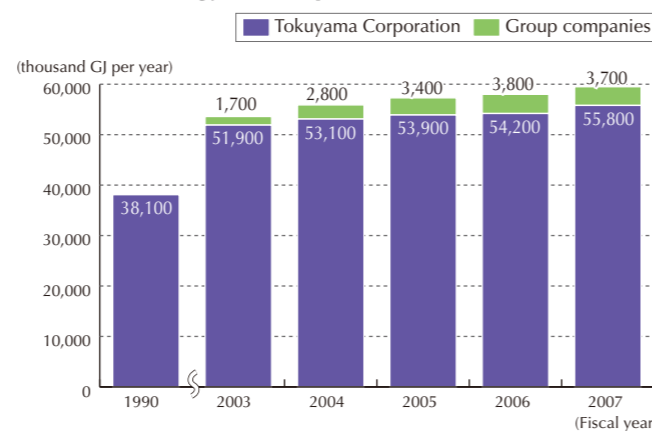
The Tokuyama Factory received the Minister of Economy, Trade and Industry Award for Excellent Energy Management Plant in fiscal 2007. Its earlier efforts in energy management and energy conservation have earned high marks.

We also take part in the Initiative to Develop the *Hydrogen Frontier Yamaguchi*. The Hydrogen Town Model Project employs hydrogen supplied from our plant, which is piped directly to general households.

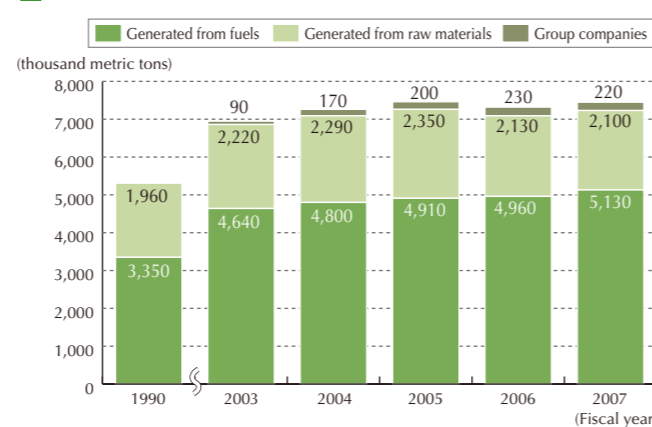
#### Trend in the Unit Energy Consumption Index (Tokuyama Factory)



#### Trend in Energy Consumption



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



Note on the Diagrams:  
The Tokuyama Plant of SunTox Co. Ltd., constituted part of Tokuyama Corporation in fiscal 2004 and earlier years. From fiscal 2005 onwards, it is counted as a group company.

#### The Tokuyama Factory won a Minister of Economy, Trade and Industry Award for Excellent Energy Management Plant.

The Tokuyama Factory won a prize from the Minister of Economy, Trade and Industry in Fiscal 2007 Award for Excellent Energy Management Plant.

Presented by the Ministry of Economy, Trade and Industry, this award recognizes outstanding energy management results of factories and other business establishments with the aim of fostering energy management. There are three prize categories – one from the Minister of Economy, Trade and Industry, one from the Director-General of the Agency for Natural Resources and Energy and the other from the Director-General of the Regional Bureau of Economy, Trade and Industry. The prize presented to the Company, the Minister's prize, is the most prestigious of the three prizes. In this fiscal year, a total of six factories across the country won the prize from the Minister of Economy, Trade and Industry.

Under the initiative of its Energy Management Committee headed by the factory chief, the Tokuyama Factory makes painstaking efforts for rational use of energy. In the past three years, it has introduced a high-efficiency salt electrolytic cell, systematized the computation of electric and steam distribution for cutting the total fuel consumption of the Factory's private power plant units, and replaced the cement cooler with a new model that offers superior heat recovery. With these actions, it successfully reduced energy consumption that is equivalent to at least 30,000 kiloliters of oil. We understand that the prize was granted in recognition of the activities conducted by individual manufacturing divisions led by the Environment and Safety Department chiefly for continuing its environmentally friendly safety operations.

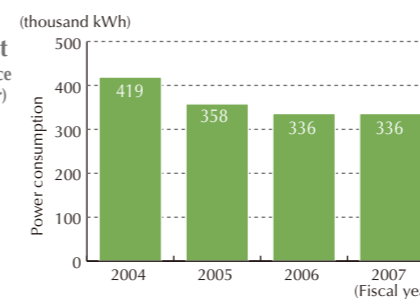


Tokuyama wins the prize from the Minister of Economy, Trade and Industry on January 30, 2008.

### Efforts at Our Offices

Tokuyama takes part in the Cool Biz campaign that began as a national movement in the summer of 2005. In addition to our conventional energy conservation efforts at our offices, we have encouraged our employees to work in light clothing and introduced thorough temperature control of the air conditioners. As a consequence, for instance, the Tokyo headquarters stopped its power consumption during the four-month period from June to September 2007 from soaring above the level of the preceding year, although the average temperature was 0.7 degrees Celsius higher during the period compared to a year earlier.

#### Cool Biz Benefit (At the Tokyo head office from June to September)



### Contribution by the Consumer and Transportation Sectors to Action against Global Warming

In supplying the *Shanon* plastic window sash, silica for energy-saving tires and other products, the Tokuyama Group has been helping to reduce the emissions of CO<sub>2</sub> in the consumer and transportation sectors, in which CO<sub>2</sub> emissions have significantly increased. The *Shanon* is a powerful tool for energy conservation in residential houses. We focus our efforts on technical developments that contribute to trend toward anti-global warming, including the construction of a verification plant for polycrystalline silicon for solar cells and the development of electrolyte membrane for fuel cells etc.

#### Program to Encourage Anti-Global Warming Actions Launched in Commemoration of the 90th Anniversary

Tokuyama has a basic policy of pursuing management in harmony with society. In accordance with this policy, the Company is stepping up its environmental, energy conservation and social contribution efforts in an effort to create a sustainable society.

As part of these efforts, Tokuyama launched a program to encourage anti-global warming initiatives in April 2008 in commemoration of the 90th anniversary of the Company's foundation.

This program covers part of the costs incurred by employees purchasing and installing specific environmentally friendly products closely related to the Tokuyama Group's business, namely the resin window sash for residential use and the solar power generation system. Its objective is to help reduce CO<sub>2</sub> emissions in the household sector by raising awareness against global warming and by encouraging householders to conserve energy. The program is open to all employees of the Tokuyama Group and applies to any of the specified products irrespective of the make.

To continuously increase awareness of the program within the Group, we present the program in our in-house newsletter and intranet to encourage our personnel to take advantage of the public support program. These internal media communicate a wide range of information on global warming to ensure that the issue is better understood by the Group's employees.

Since the launch of the program, there have been a large number of applications from staff members in the Group. This shows their current high level of interest in environmentally considered products. It is hoped that the launch of this program will help to cultivate environmental awareness among the Group's employees on an ongoing basis.

#### VOICE



**Katsuhiro Takeo**  
Assistant Manager  
Plant Maintenance  
Dept.  
Tokuyama Factory

#### I have purchased a solar power generation system.

When I was rebuilding my house, I heard that the solar power generation system from the housing manufacturer was of a silicon type. I was happy to learn that because I used to work in the construction and maintenance of polysilicon manufacturing facilities. The system was a little expensive, but I think the costs can be recovered in about two decades in view of the unit's performance after installation. The power generation volume at home and the amount of electricity purchased from the electric power company are continually displayed on the monitor screen. It has drastically changed the attitude of all my family members towards energy conservation.

I am thankful to be able to enjoy financial support from the program for encouraging anti-global warming activities. I hope that the program will contribute to the expanded use of solar power generation and help stop global warming.

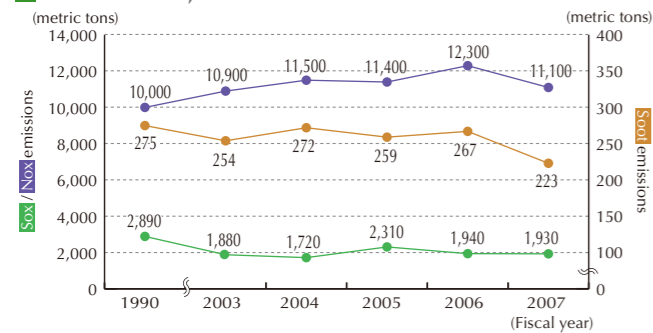
## Reduction of Air and Water Pollutants

Tokuyama has always adopted a broad array of measures on a continuing basis to reduce air, water and other environmental pollutants. In fiscal 2007, SOx, NOx and soot emissions were successfully lowered.

### Air Pollutants Emissions

Every boiler in Tokuyama's private power plants is equipped with a flue gas desulfurization system to reduce sulfur oxides (SOx) emissions. In fiscal 2007, as in the preceding year, we continued environmentally considered operations of our private power plants to successfully slash SOx emissions. To reduce nitrogen oxides (NOx) and soot emissions, denitration equipment, low-NOx burners and high-performance dust collectors are added to the sources of NOx and soot emissions, namely boilers and cement calcination furnaces. In fiscal 2007, the sluggish cement market resulted in poorer operation of cement manufacturing systems and in lower NOx and soot emissions.

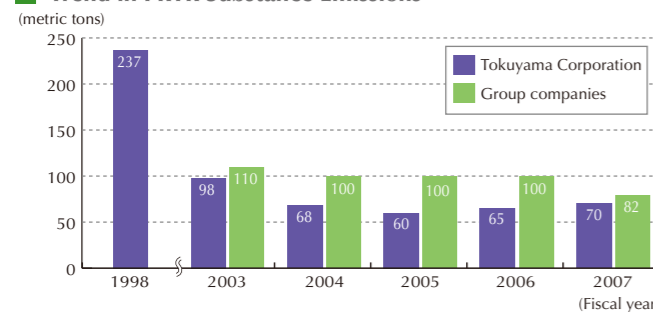
#### Trend in SOx, NOx and Soot Emissions



### PRTR Substances Emissions

Of all the substances that the Company handled in fiscal 2007, 27 substances are subject to notification under the Pollutant Release and Transfer Register (PRTR)<sup>1</sup> legislation. In fiscal 2007, our factories and offices separately conducted emission control measures but the total emissions climbed slightly after there was an increase in the number of times the equipment was started up and shut down.

#### Trend in PRTR Substance Emissions



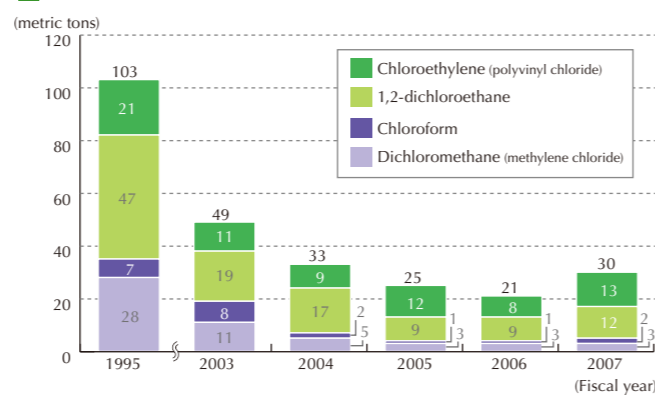
### Anti-Dioxin Measures

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

### Hazardous Air Pollutants Emissions

Tokuyama devised a voluntary reduction plan and continuously takes measures against chloroethylene and three other substances it produces that are among the 12 substances subject to voluntary management under the Air Pollution Control Law. Despite the efforts, the emissions of the four substances increased slightly after an increase in frequency of starting and shutting down the equipment.

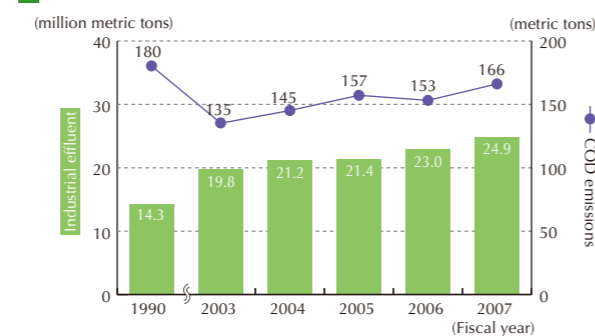
#### Trend in Hazardous Air Pollutants Emissions



### Industrial Effluent and Water Pollutants Emissions

At the Tokuyama Factory, the hydrogen ion concentration (pH) and the suspended solids (SS) concentration in industrial effluent are under strict control. The Kashima Factory contracts with a terminal treatment plant to treat its effluent. To treat process effluent that contains organic substances, activated sludge process equipment has been installed to reduce the chemical oxygen demand (COD)<sup>2</sup>. Since fiscal 2004, our measurements have been covering nitrogen and phosphorus as well. They are subject to total volume control under the Water Pollution Control Law. In fiscal 2007, we saw a slight increase in emissions due to the high level of equipment operation, but the emission levels are still considerably below the regulatory limits.

#### Trend in Industrial Effluent and COD Emissions



#### Nitrogen and Phosphorus Emissions

Item	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
Nitrogen	94	95	110	112
Phosphorus	7.8	4.0	3.9	4.5

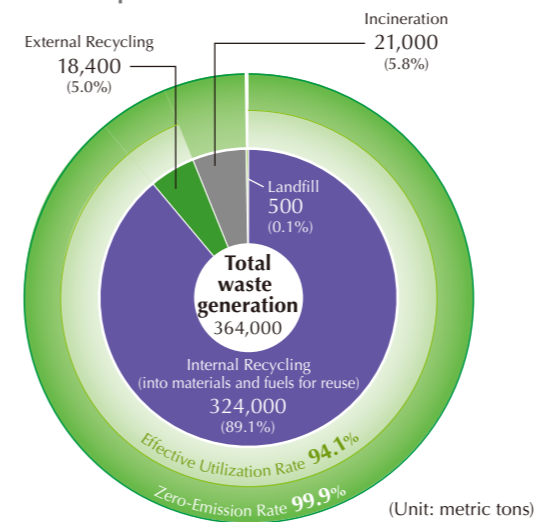
## Waste Reduction and Recycling

Tokuyama worked intensively to reduce and recycle waste. The rate of effective utilization of waste reached 94.1% and the zero-emission rate 99.9%.

### Waste Management

In fiscal 2007, Tokuyama generated 360,000 metric tons of waste. It actively recycled them internally and externally, mainly reusing them as cement material at the Tokuyama Factory. Packing materials, pallets and other wood waste were crushed into fuel so that they can be effectively used at power plants. As we worked diligently recycling waste into material for cement, our rate of effective utilization of waste stood at 94.1%. We stepped up our activities for reusing and reducing waste to achieve a high landfill zero-emission rate of 99.9%.

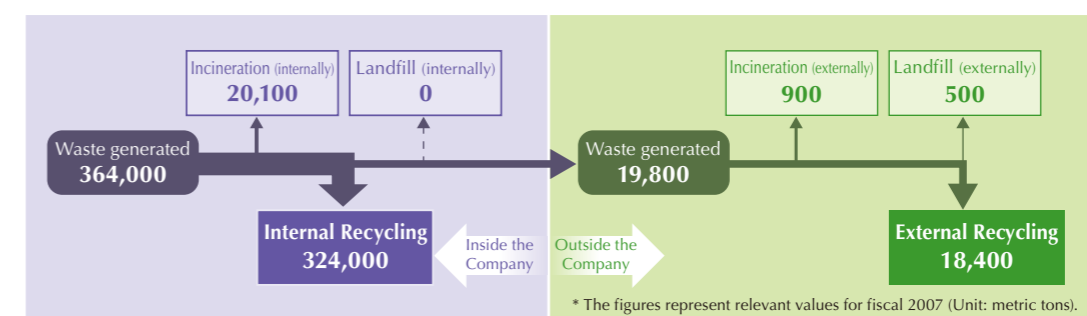
#### Breakdown Graph of Industrial Waste Treatment in Fiscal 2007



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

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

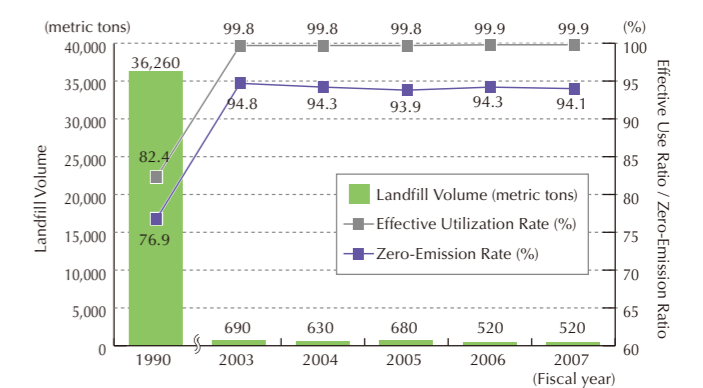
#### Process Flow of Industrial Waste Treatment



### Management and Treatment of PCB Waste

The Tokuyama Group has 81 transformers and capacitors containing polychlorinated biphenyl (PCB)<sup>3</sup>. All of them have already fallen into disuse. 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 national government, wide-area PCB treatment facilities are increasingly constructed and coming into operation in succession. Taking advantage of the early registration program, the Tokuyama Group finished its registration to the Japan Environmental Safety Corporation (JESCO) in December 2005. In the future, we will be properly treating our PCB waste in line with the timetables of the wide-area treatment project in separate districts.

#### Trend in Waste Landfill Volume, Effective Utilization Rate and Others



<sup>1</sup> Terminology \*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 establishments in the form in which they are contained in waste.

<sup>2</sup> Chemical oxygen demand (COD) is an indicator of the water pollution level and refers to the amount of oxygen consumed by oxidizing organic substances in water.  
<sup>3</sup> Polychlorinated biphenyl (PCB) is an organic chlorinated compound that emits dioxins when burnt in 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-contained products that have already been distributed have to be retained at business establishments.

## Development of Environmental Products and Technologies

The Tokuyama Group continued to develop environmental products and recycling technologies in fiscal 2007. Initiatives included the development of technologies for mass producing polycrystalline silicon for solar cells, demand for which has been increasing sharply, and operation of a verification plant.

### Development of Hydrocarbon-based Electrolyte Membranes for Fuel Cells

Joint development with Asahi Kasei Chemicals Corporation and preliminary development of anion electrolyte membranes

Tokuyama develops hydrocarbon-based electrolyte membranes for direct methanol fuel cells<sup>1</sup> (DMFCs<sup>2</sup>) and anion fuel cells. DMFCs look set to serve as power sources for cell phones, laptop computers and other mobile electronic devices. The development of cation type electrolyte membranes<sup>3</sup> for DMFCs was conducted jointly with Asahi Kasei Chemicals Corporation, and successfully produced a high output type and a low methanol permeability type. The two companies achieved substantially improved performance with their electrolyte membranes for DMFCs and began supplying samples. The high output type produces output of at least 130 mW/cm<sup>2</sup>. The low methanol permeability type is a revolutionary hydrocarbon

electrolyte membrane with methanol permeation reduced to one-twentieth the level of the fluorine electrolyte membrane.

We started supplying anion electrolyte membrane samples two years ago. One of the advantages of anionic fuel cells lies in the fact that non-platinum catalysts and different types of fuels can be used. They have been attracting attention as the source of the next generation of fuel cells, which are both environmentally friendly and can be used in vehicles and elsewhere. At present, new fuel cells incorporating Tokuyama's anion electrolyte membranes are being developed in many different locations around the world. We are striving to achieve a de facto standard for anion electrolyte membranes.



A cation-based electrolyte membrane for DMFCs developed jointly with Asahi Kasei Chemicals Corporation

#### VOICE



Kenji Fukuta  
Manager  
Corporate Development  
Dept. (Tsukuba)  
Research &  
Development Div.

#### For the day when a dream fuel cell will become a reality

Since I was a student majoring in electrochemistry, the fuel cell has been a dream technology for me. Every day, I feel proud and happy to be working on the development of electrolyte membranes as a key material for fuel cells. A fuel cell consists of many different materials. A number of issues must be addressed, with electrolyte membrane and other materials alike. We work together with Asahi Kasei Chemicals Corporation, our users and universities to combine technologies and knowledge in an effort to create a dream battery that has no impact on the environment.

### Polycrystalline Silicon for Solar Cells

Helping to prevent global warming through solar cells

The fight against global warming is an urgent issue that confronts all humanity. Many countries are working to manufacture solar cells for photovoltaic power generation with a view to effectively using solar energy, an environmentally clean source of energy that is available to everybody equally. The power generation capacity of solar cells produced in 2007 reached 3733 megawatts (Source: *PV News*, March 2008). This capacity exceeds the 2001 level of 400 megawatts by a factor of 9.3.

Nearly 90% of solar cells are produced from polycrystalline silicon. Tokuyama currently supplies some of its polycrystalline silicon products as a material for its solar cells, as part of the anti-global warming initiative.

We expect to increase our production of polycrystalline silicon for solar cells by an additional 500 metric tons a year in 2009. Facility construction is progressing well and according to plan.

The use of solar cells will not increase and help prevent global warming unless the cost of polycrystalline silicon, used as a



Verification plant for manufacturing polycrystalline silicon for solar cells

material for solar cells, is reduced. We are now running a verification test at a plant with an annual production of 200 metric tons using the VLD method that can in theory produce polycrystalline silicon quickly and efficiently.

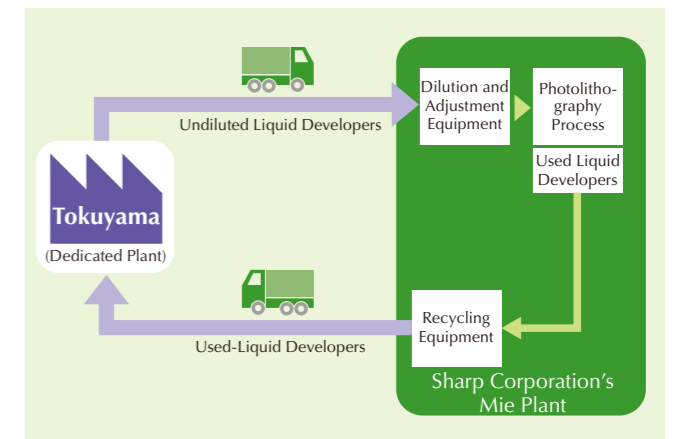
### A Closed System for Liquid Developers

Material recycling for used liquid developers

Tokuyama and Sharp Corporation finished developing material recycling technologies for used liquid developers in liquid crystal panel plants. In April 2005, a closed system to collect, recycle and reuse development solutions between Sharp Corporation's Mie Plant in Taki-gun, Mie Prefecture and Tokuyama's dedicated plant have begun commercial operation. We conducted a three-year demonstration trial with a pilot plant to identify and address practical problems from a number of different perspectives. As a result, the system has been operating at a high level of satisfaction for three years since the commencement of commercial operation.

Going forward, we aim to improve the technologies and reduce costs so that they can be used without anxiety, not only by liquid crystal panel manufacturers but by many other liquid developer users as well. We are also developing product manufacturing and disposal technologies that have low environmental impacts right through the supply chain, encompassing the use and disposal by manufacturers and users of liquid developers.

#### The Closed System for Liquid Developers at Sharp Corporation's Mie Plant



### Ion Exchange Membranes

Clean technologies that help prevent environmental pollution

ASTOM Corporation

ASTOM Corporation, a Tokuyama Group company, helps resolve environmental problems with its separation technology based on the *NEOSEPTA* ion exchange membranes and the *ACLYZER* high performance electro dialyzer incorporating *NEOSEPTA*. Ion exchange membranes facilitate the selective permeation of positive and negative ions dissociated in solution. Traditionally, ion exchange membranes have been used in salt production, food, fresh water generation, pharmaceuticals and the treatment of waste liquids. Today, ion exchange membranes have application in the separation and collection of acid and alkaline in waste liquids, the treatment of leachate at waste disposal facilities and the removal of nitrate nitrogen from groundwater as part of initiatives to prevent environmental pollution. Ion exchange membranes are therefore attracting the attention of the international community as a clean technology that serves to stop environmental pollution.

In fiscal 2007, they were used to refine organic acid for biodegradable plastics, for the high-efficiency resource recycling

of pickling wastewater and for amine refinement from waste amine catalysts emitted from petrochemical plants. These separation technologies will be of increasing importance in the battle against global warming. It is hoped that they will be actively used in creating the recycling society of the future.



The *ACLYZER* high performance electro dialyzer based on ion exchange membranes

**Terminology** \*1 A fuel cell is a chemical battery where the reverse of water electrolysis takes place. In other words, hydrogen fuel reacts with oxygen in the air to produce electric power.  
\*2 A direct methanol fuel cell (DMFC) is a fuel cell in which the catalytic electrode in the cell transforms the methanol fuel into hydrogen ions.  
\*3 An electrolyte membrane is a membrane that selectively conducts ions.

### The Triple Shanon Plastic Window Sash

Releasing higher performance plastic window sashes to serve energy conservation (CO<sub>2</sub> reduction) in households

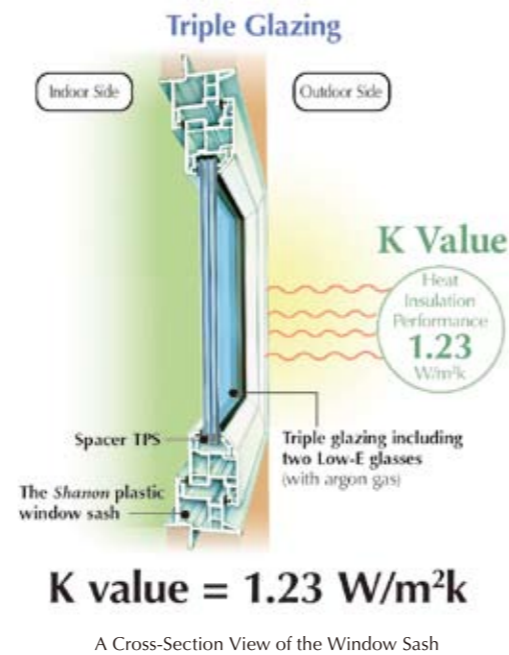
Shanon Corporation

Shanon Corporation, one of Tokuyama's group companies, manufactures and sells the Shanon Window, plastic sashes, with exceptional levels of air tightness, thermal insulation, sound proof and moisture condensation proof characteristics.

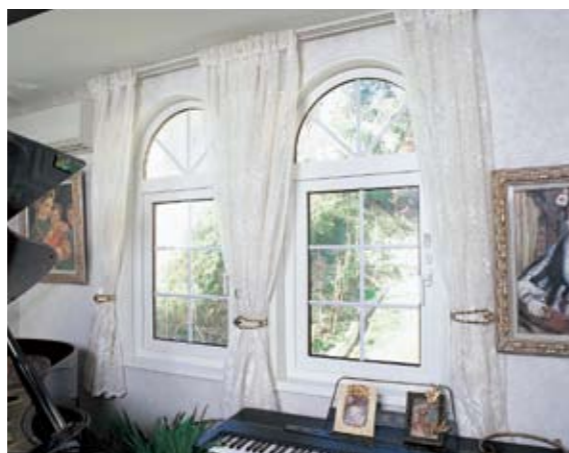
To prevent global warming, all companies and citizens are required to reduce the emissions of carbon dioxide and other greenhouse gases. While efforts to reduce emissions are continuing apace in the industrial sector, there is a huge gap between the reduction target and the actual results in the household sector. Effective solutions are needed in this area. The residential construction industry takes many different actions. Among others, plastic window sashes are attracting attention for their superior performance in reducing energy as they add a high level of air-tightness and heat insulation when used in residential houses.

We now see some houses without heaters emerging in the market. Their Q value<sup>1</sup> is low at 1.0 W/m<sup>2</sup>k. The lower the Q value, the higher the level of heat insulation. In creating these houses, it is essential to improve the performance of plastic window sashes for high-quality windows.

In April 2008, Shanon Corporation released the Triple Shanon, which features the lowest K value at 1.23 W/m<sup>2</sup>k of any product in the Japanese window sash market. A low K value<sup>2</sup> reflects a high level of heat insulation. With the Triple Shanon, electricity costs are about 15% lower<sup>3</sup> than with an ordinary aluminum-plastic composite window sashes. This product helps cut carbon dioxide emissions.



Plastic window sashes, "Shanon Window"



# Site Report

## Tokuyama Factory

Location: 1-1, Mikage-cho, Shunan, Yamaguchi Prefecture  
 Employees: 1,630  
 Factory Area: 1,910,000 square meters (total area)

Seiichi Shiraga  
 General Manager of Tokuyama Factory, and Managing Director



**Main Products** Cement, inorganic and organic chemical products, polycrystalline silicon, silica, vinyl chloride and others

\* For further details about the factory, see page 11.

### Performance Data

	Unit	Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
SOx Emissions	metric tons	1,880	1,720	2,310	1,940	1,930
NOx Emissions	metric tons	10,900	11,500	11,400	12,300	11,100
Soot Emissions	metric tons	254	272	259	267	223
Industrial Water Consumption	mil. metric tons	47.1	50.1	49.5	45.8	41.1
Effluent	mil. metric tons	19.6	21.1	21.3	22.8	24.8
COD Emissions	metric tons	131	141	152	148	161
Total Nitrogen Emissions	metric tons	-	94	95	110	112
Total Phosphorus Emissions	metric tons	-	7.8	4.0	3.9	4.5
PRTR Substances Emissions	metric tons	95	66	57	63	67
Waste Emissions	thousand metric tons	383	395	349	360	363
Waste Final Disposal Volume	metric tons	650	610	660	480	480
Energy Consumption	thousand GJ	51,800	53,000	53,900	54,100	55,700
CO <sub>2</sub> Emissions (in fossil fuel equivalents)	thousand metric tons	4,640	4,800	4,910	4,960	5,130
Complaints	complaints	4	5	5	3	6

## Kashima Factory

Location: 26, Sunayama, Kamisu, Ibaraki Prefecture  
 Employees: 81  
 Factory area: 101,000 square meters

Osamu Iwamoto  
 General Manager of Kashima Factory



**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 coat solutions); materials for electronic materials and metal washing solutions

### Tokuyama Dental Corporation's Kashima Plant

Dental materials (restorative materials, adhesives, denture relining materials, impression materials, plaster materials and investment materials)

### A&T Corporation's Kashima Works

Reagents for clinical analysis (electrolyte analysis reagents and glucose analysis reagents)

- Tokuyama Dental Corporation has changed the materials for some products from dichloromethane to water-based materials. The company will roll out the change of materials for other products to reduce the level of dichloromethane emissions into the atmosphere.
- Material recycling of waste acetone and waste toluene has been in operation since fiscal 2005. In fiscal 2007, material recycling was commenced to recover iodine from effluent containing iodine compounds. In the same fiscal year, the percentage of effectively used waste rose three percentage points, to 74%.



### PRTR Substances Emissions and Displacement by Substance in Fiscal 2007

Unit: metric tons (mg-TEQ for dioxins only)

Substance	Government Ordinance Number	Emissions				Displacement
		To Air	To Water	To Soil	Subtotal	
Cresol	67	0.0	24.0	0.0	24.0	0.0
1,2-Dichloroethane	116	13.1	0.0	0.0	13.1	0.1
Chloroethylene (Polyvinyl Chloride)	77	12.3	0.0	0.0	12.3	0.0
Toluene	227	6.8	0.0	0.0	6.8	160.8
1,2-Dichloropropane	135	4.5	0.0	0.0	4.5	211.8
Water soluble zinc compounds	1	0.0	2.4	0.0	2.4	0.0
Chloromethane (Methyl Chloride)	96	1.9	0.0	0.0	1.9	0.0
Dichloromethane (Methylene Chloride)	145	1.0	0.0	0.0	1.0	0.0
1,2-Epoxypropane (Propylene Oxide)	56	0.6	0.0	0.0	0.6	2.6
Chloroform	95	0.5	0.0	0.0	0.5	0.0
Carbon Tetrachloride	112	0.1	0.0	0.0	0.1	0.0
Benzene	299	0.0	0.0	0.0	0.0	0.0
2,2'-Azobisisobutyronitrile	13	0.0	0.0	0.0	0.0	0.0
2-Aminoethanol	16	0.0	0.0	0.0	0.0	3.6
Ethylene Glycol	43	0.0	0.0	0.0	0.0	0.0
Nickel compounds	232	0.0	0.0	0.0	0.0	0.0
Hydrazine	253	0.0	0.0	0.0	0.0	0.0
Di-n-Butyl Phthalate (DBP)	270	0.0	0.0	0.0	0.0	0.0
Hydrogen Fluoride and its water soluble salts	283	0.0	0.0	0.0	0.0	0.0
Boron and its compounds	304	0.0	0.0	0.0	0.0	0.0
Dioxins	179	99.4	4.8	0.0	104.2	0.0
Total (excluding dioxins)		40.9	26.4	0.0	67.3	378.9

The substances are listed in descending order of emissions and, for substances that were not emitted at all, in order of government ordinance number. Emissions to Water refers solely to the emissions released into public waterways. Displacement refers to the combination of the quantity displaced to sewerage and the quantity subject to intermediate treatment. Total shows the value rounded to one decimal place after adding the values to three decimal places.

### Performance Data (in total of three companies)

	Unit	Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
Industrial Water Consumption	thousand metric tons	96	91	112	110	107
Effluent	thousand metric tons	109	107	126	125	129
COD Emissions	metric tons	4	4	5	5	5
PRTR Substances Emissions	metric tons	3	3	2	3	4
Waste Emissions	metric tons	634	769	749	779	965
Waste Final Disposal Volume	metric tons	43	29	15	34	32
Energy Consumption	thousand GJ	46	45	51	53	58
CO <sub>2</sub> Emissions (in fossil fuel equivalents)	ton	2,170	2,180	2,130	2,170	2,320
Complaints	complaints	0	0	0	0	0

### PRTR Substances Emissions and Displacement by Substance in Fiscal 2007 (in the total of three companies)

Unit: metric tons

Substance	Government Ordinance Number	Emissions				Displacement
		To Air	To Water	To Soil	Subtotal	
Dichloromethane (Methylene Chloride)	145	1.6	0.0	0.0	1.6	6.9
Chloroform	95	1.1	0.0	0.0	1.1	12.6
Toluene	227	1.0	0.0	0.0	1.0	2.7
Methyl Methacrylate	320	0.0	0.0	0.0	0.0	0.0
Acetonitrile	12	0.0	0.0	0.0	0.0	2.5
1,4-Dioxane	113	0.0	0.0	0.0	0.0	0.1
Ethylene Glycol	43	0.0	0.0	0.0	0.0	4.6
N,N-Dimethylformamide	172	0.0	0.0	0.0	0.0	26.9
2-Vinylpyridine	256	0.0	0.0	0.0	0.0	0.2
Formaldehyde	310	0.0	0.0	0.0	0.0	0.0
2,3-Epoxypropyl Methacrylate	316	0.0	0.0	0.0	0.0	0.0
Alpha-Methylstyrene	335	0.0	0.0	0.0	0.0	0.0
Total		3.7	0.0	0.0	3.7	56.4

The substances are listed in descending order of emissions and, for substances that were not emitted at all, in order of government ordinance number. Emissions to Water refers solely to the emissions released into public waterways. Displacement refers to the combination of the quantity displaced to sewerage and the quantity subject to intermediate treatment. Total shows the value rounded to one decimal place after adding the values to three decimal places.

**Terminology** \*1 The Q value is the heat loss coefficient and represents the heat insulation performance of the entire building.  
 \*2 The K value is the heat transfer coefficient and represents the heat insulation performance of the wall, floor or other parts of the building.  
 \*3 The expression, "15% lower," is based on the new reference rate for electric power set by the Home Electric Appliances Fair Trade Conference under the SMASH simulation program.

# Activities of Group Companies

Tokuyama understands that responsible care activities should be conducted on a group-wide basis. The Company has signed RC management agreements with Tokuyama Group companies both inside and outside Japan engaging in production activities to support their activities.

We collect data on the environmental impact of group companies and their safety management indicators and conduct safety and environmental 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. The trend of statutory regulations and other information are shared with our group companies.

We also provide our group companies with assistance in acquiring ISO 14001 and ISO 9001 certification.

## ISO 9001 and ISO 14000 Certification Status of Eleven Group Companies

Group Company	ISO 9001	ISO 14001
Sun Tox Co., Ltd.	●	●
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 the certified sites

## Sun Tox Co., Ltd.

Date of Foundation: February 14, 1992 Ownership: Tokuyama Corporation (100%)  
 Head Office: Annex to Tokuyama Bldg. 1-4-5, Nishi Shimbashi, Minato-ku, Tokyo  
 Business: Manufacture and sale of biaxial-oriented polypropylene films and cast polypropylene films (including co-extrusion multi-layer films)

### Kanto Plant Location: 3075-18, Shimasu, Itako, Ibaraki Prefecture



Plant Manager: Hideki Tanaka  
 Employees: 181  
 Area: 55,800 square meters

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 plant, it has been making strides in energy conservation. In fiscal 2004, it introduced a co-generation system to ensure the effective use of energy. As a result, its consumption of heavy oil in the boilers fell below half the level for fiscal 2004. In addition, the number of unanticipated shutdowns caused by power failure was reduced to nearly zero.

In February 2008, the Kanto Plant obtained certification of conformity of its occupational safety and health system from the Japan Industrial Safety and Health Association. With ISO 14001 and ISO 9001 certification, it adopts environmental, safety and quality management systems. Nominating the thirtieth day of each calendar month as No-Garbage Day, it engages in cleaning activities in the neighboring areas.

### Performance Data

	Unit	Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
Power Consumption	thousand kWh	27,810	28,470	28,480	29,730	29,271
Heavy Oil Consumption	kl	1,460	1,470	910	600	639
SOx	metric tons	2.0	2.0	0.7	0.6	0.4
NOx	metric tons	3.3	3.3	0.9	0.5	0.7
Soot Particles	metric tons	0.3	0.3	0.04	0.03	0.04
Industrial Water Consumption	metric tons	52	53	63	59	66
Waste Emissions	metric tons	27	90	22	52	60
Waste Final Disposal Volume	metric tons	20	0	0	9	29
COD Emissions	metric tons	0.02	0.02	0.02	0.01	0.01

### Tokuyama Plant Location: 7-7, Harumi-cho, Shunan, Yamaguchi Prefecture



Plant Manager: Toshiyuki Yamaoka  
 Employees: 148  
 Area: 24,100 square meters

Located on the premises of Tokuyama Corporation's Tokuyama Factory, the Tokuyama Plant produces 23,000 metric tons of biaxial-oriented polypropylene films per year. In conjunction with the Tokuyama Factory, it addresses environmental preservation and maintains ISO 14001 certification. Since fiscal 2005, it has been slashing manufacturing losses as a means of reducing unit energy consumption. The plant is committed to recycling all generated manufacturing losses.

It obtained certification for the Occupational Health and Safety Management System in February 2008. Going forward, it will be introducing health and safety activities centering on risk assessment and developing them into a management system through a PDCA cycle.

Under the slogan of "Take pleasure in production, be stringent with quality and adhere to safety," the Tokuyama Plant aims to implement plant management in a manner that earns the trust of society, the customers and employees.

### Performance Data

	Unit	Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
Unit Energy Consumption	L/kl	481	489	465	453	457
Power Consumption	thousand kWh	36,170	35,740	35,770	34,230	34,830
0.3 MPa Steam Consumption	metric tons	3,080	2,610	2,930	4,220	3,410
2.1 MPa Steam Consumption	metric tons	42,270	42,760	44,830	42,270	43,830
Waste Emissions	metric tons	100	80	160	180	200
Waste Final Disposal Volume	metric tons	4	2	0	1	11

## Sun Arrow Chemical Co., Ltd.

Date of Foundation: February 1, 1999  
 Ownership: Tokuyama Corporation (100%)  
 Head Office: Kitahama Chuo Bldg., 2-2-22, Kitahama, Chuo-ku, Osaka  
 Business: Manufacture and sales of polyvinyl chloride compounds

### Tokuyama Plant 1-2, Harumi-cho, Shunan, Yamaguchi Prefecture



Plant Manager: Shigefumi Kunihiro  
 Employees: 28  
 Area: 3,280 square meters

### RC activities of the Tokuyama Plant

Located within the premises of Tokuyama Corporation's Tokuyama Factory, the Tokuyama Plant produces polyvinyl chloride compounds for plastic window sashes. Because of their effectiveness in energy conservation, plastic window sashes are in growing demand.

In fiscal 2007, as in the preceding year, it recycled waste plastics into resources. Consequently, it succeeded in turning all such waste into valuable resources and in reducing the final volume of disposed of waste to zero.

Ensuring health and safety and disaster prevention are part of the

### Performance Data

	Unit	Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
Power Consumption	thousand kWh	2,790	3,020	3,210	3,540	3,470
Waste Plastics Emissions	metric tons	132	150	172	186	158
Effective Used Waste Plastics Volume	metric tons	131	150	172	186	158
Waste Final Disposal Volume	metric tons	0.3	0.2	0.1	0	0
Steam Consumption	metric tons	240	240	240	240	240
Industrial Water Consumption	thousand metric tons	65	65	65	65	65

responsibility that the plant has to meet. Implementing the management of equipment and operations in compliance with applicable laws and regulations and implementing voluntary activities for 5S practice, preventing careless mistakes, training in risk anticipation and the like, the plant successfully maintained the accident-free status. As a member of the Tokuyama Group, it will place top priority on environmental and safety considerations and constantly seek corporate development as well as the coexistence and mutual prosperity with the local community.

## Tokuyama Polypropylene Co., Ltd.

Date of Foundation: April 2, 2001  
 Ownership: Tokuyama Corporation (50%) and Prime Polymer Co., Ltd. (50%)  
 Head Office: 1-1, Harumi-cho, Shunan, Yamaguchi Prefecture  
 Business: Manufacture and sales of polypropylene resins and polypropylene compound resins

### Tokuyama Plant 1-1, Harumi-cho, Shunan, Yamaguchi Prefecture



Plant Manager: Hiroshi Horii  
 Employees: 65  
 Area: 70,997 square meters

### Performance Data

	Unit	Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006	Fiscal 2007
Industrial Water Consumption	thousand metric tons	402	410	443	387	417
Waste Emissions	metric tons	106	134	85	161	141
Waste Final Disposal Volume	metric tons	0	20*	0	25*	4
Unit Energy Consumption Index (Fiscal 2002 = 100)	%	86	87	79	79	85

\* Year with periodic repairs

Located within the premises of Tokuyama Corporation's Tokuyama Factory, the Tokuyama Plant engages in manufacturing and selling 200,000 metric tons of polypropylene resins per year and 5,000 metric tons of polypropylene compound resins per year.

This plant runs three management systems: the safety management system, the environmental management system and the quality management system. Its RC activities are integrated with those of the Tokuyama Factory.

Its safety management activities are based on the risk assessment of processes, equipment and work. Its zero-accident status has been maintained for 33 years, including the period when it was the Polypropylene Manufacturing Department.

In fiscal 2007, it was highly commended for the presentation of outside examples regarding its efforts in non-routine work, the handing down of techniques to future generations and anti-HHK\* activities. The plant was honored to receive an award from the president of the Yamaguchi Prefecture Federation of Associations for the Safety of Hazardous Materials, winning the fiscal 2007 prize as a business with outstanding handling of hazardous materials.

Fiscal 2008 is a year in which periodic repair work, which takes place every other year. To meet its goals of maintaining its zero-accident status, reducing its environmental impact and not receiving any complaints concerning quality, it will be stepping up its RC activities.

Terminology \*1 HHK stands for *hiyari, hatto* and *kigakari* and refers to careless mistakes and situations that cause concern.

## Comments from Third Parties

### A Review on Tokuyama's CSR Report 2008

Eriko Nashioka

Certified Public Accountant and Director of the Institute for Environmental Management Accounting

#### Profile

A part-time lecturer in environmental accounting and environmental auditing for the Faculty of Commerce of Doshisha University. After completing her studies in environmental management at the Doshisha University Graduate School of Policy and Management in 1997, she joined the Environmental Auditing Section, the Third Department at the Osaka Office of Century 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 Business and Investment & Consultation Companies Law), environmental audits and environmental reports. 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 environmental accounting 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.



#### ■ Evolving into a Company Based on CSR Management

Tokuyama's CSR Report convinces me that Tokuyama is an honest, diligent company with a long history. Independently of CSR, I feel that the Company has long been taking a sincere attitude towards its stakeholders. However, CSR management in its optimum form today needs to combine individual actions systematically. I understand that Tokuyama is aware of that and is now striving towards it.

#### ■ A Management Structure for Achieving the Centennial Vision

Envisioning the optimum form of the Company in its Centennial Vision after marking the 90th anniversary, Tokuyama has adopted CSR as a basis of its management. That reminds me of its strong determination to push ahead with CSR activities. I think the Company's continuation in the past 90 years and its aspiration toward its centennial are supported by its ability to adapt to new times.

This report refers to several goals and plans. I believe they are all backed by Tokuyama's philosophy and that they are implemented in a sound manner. However, I feel that the interrelations among the separate plans are a bit too complicated. Among other things, it is an urgent priority to reorganize and integrate the principle behind the responsible care activities that have long been avidly performed with the new concept of CSR management. The Centennial Vision deserves high marks as a statement of what the enterprise should be like in the future and I hope that it will be realized.

#### ■ The Notion of Human Resources

Human resources are another foundation that can be compared to CSR. I realize that Tokuyama values people. The slogan of "standing tall like a sunflower proudly facing the sun" is a good phrase that depicts the ideal style of business from people's standpoint. Tokuyama is surrounded by a broad array

of human stakeholders including its employees. People becomes assets through enhanced communications. It is a key challenge in the future CSR management. I hear that Tokuyama will be building a PDCA system for personnel and other social affairs. I expect that this will further enhance CSR management.

#### ■ Environmental Preservation Activities in the Core Business

I see from CSR Report that Tokuyama has long been actively engaged in environmental preservation activities. At the Tokuyama Factory, the birthplace of the business, greater environmental efficiency is consistently sought all through the processes, including installation of private power plants and integration. The Company's business operations are linked with environmental conservation to ensure that its core businesses are matched with the age of the environment. For example, Tokuyama makes use of waste generated by external parties as an ingredient in its cement business and produces materials for solar cells and the development of materials for fuel cells. These domains are very promising in terms of initiatives to prevent global warming and it is hoped that Tokuyama will contribute to the environment as well as the economy.

#### ■ Information Disclosure and Awareness-Raising Activities

The report is of a length that can be easily digested and provides footnotes for technical terms. It is very reader-friendly. Showing how Tokuyama's products are found in everyday life, it is designed to stress Tokuyama's close involvement with the public. The report will be even easier to read if the color scheme and consistency are improved. I hope that the CSR Report will be actively used as a means of deepening the understanding of employees and other stakeholders and for developing them into human assets.

#### Receiving Comments from Third Parties

I think that we have received on-target comments and remarks on our current circumstances and problems. In particular, we realize that it is an important task to reorganize and integrate the principle of responsible care and other past activities and the principle of CSR management. We will be reviewing these activities from the standpoint of stakeholders to clearly identify the direction of our CSR management. And we

will be building a mechanism for efficient operation of the PDCA cycle with the aim of evolving into a manufacturing company in harmony with society.

Etsuro Matsui,  
Managing Director and General Manager  
of the Corporate Social Responsibility Division

## History of Tokuyama's RC Activities

<b>July 1991</b>	Global Environmental Issues Committee established		
<b>March 1993</b>	Establishes the RC Administration Committee		
<b>March</b>	Institutes a voluntary plan for Total Management of Environment, Safety and Quality		
<b>April 1994</b>	Acquires ISO 9002 certification for high-purity isopropyl alcohol		
<b>June</b>	Develops product warranty systems, including product and labeling assessments		
<b>April 1995</b>	Joins the Japan Responsible Care Council		
<b>May 1997</b>	Acquires ISO 9001 certification for cement manufacturing		
<b>September</b>	Publishes the first edition of the RC Report		
<b>April 1998</b>	Acquires ISO 9001 certification for the manufacturing of dental materials		
<b>December</b>	Acquires ISO 9001 and 9002 certification for aluminum nitride and functional powders and ISO 14001 certification for the Tokuyama Factory		
<b>January 1999</b>	Acquires ISO 14001 certification for the Kashima Factory		
<b>June</b>	Acquires ISO 9002 certification for chemical products, polypropylene, films and others		
<b>December</b>	Sets up the Ecological Management Initiative Department		
<b>December</b>	Acquires ISO 9002 certification for polycrystalline silicon, organic solvents and suchlike		
<b>August 2000</b>	Creates the Recycling and Environmental Business Department		
<b>April 2001</b>	Establishes Yamaguchi Eco-Tech Corporation.		
<b>April 2002</b>	Acquires ISO 9002 certification for vinyl chloride monomer and polyvinyl chloride		
<b>June</b>	The Kashima Factory becomes the recipient of the Award for Earth-Friendly Companies from the Ibaraki Prefectural Government.		
<b>March 2003</b>	Recipient of an award from the Director-General of the Industrial Science and Technology Policy and Environment		
		<b>April</b>	Bureau of the Ministry of Economy, Trade and Industry in the Award for Resource Recycling Technologies and Systems
			Renews ISO 9001 certification under 2000 standard and concurrently extends its scope to the sales sector
		<b>December</b>	Undergoes the Responsible Care verification process.
			The Tokuyama Factory achieves a Type II zero-accident record (8.1 million hours for the chemical industry) as defined by the Ministry of Health, Labour and Welfare
		<b>October 2004</b>	Figaro Engineering Inc. acquires ISO 14001 certification.
		<b>October</b>	The Kashima Factory becomes the recipient of a prize presented by the Director-General of Labor Bureau of the Ibaraki Prefectural Government.
		<b>February 2005</b>	The Tokuyama Factory becomes the recipient of a prize presented by the Director-General of the Agency of Natural Resources and Energy for Factories with Distinguished Energy Management (electricity sector).
		<b>March</b>	Acquires Yamaguchi Prefecture Eco-Factory certification for the Tokuyama Factory
		<b>June</b>	The Tokuyama Factory achieves a Type III zero-accident record (12.2 million hours for the chemical industry) as defined by the Ministry of Health, Labour and Welfare.
		<b>September</b>	ASTOM Corporation acquires ISO 9001 certification.
		<b>August 2006</b>	Shanghai Tokuyama Plastics Co., Ltd. acquires ISO 9001 certification.
		<b>October</b>	Tokuyama Mtech Corporation acquires ISO 9001 certification.
		<b>December</b>	The Kanto Plant of Sun Tox Co., Ltd. acquires ISO 14001 certification.
		<b>April 2007</b>	Establishes the Corporate Social Responsibility Division.
		<b>January 2008</b>	The Tokuyama Factory becomes the recipient of a prize presented by the Minister of Economy, Trade and Industry in the Award for Excellent Energy Management Plant.

## Editor's Notes

This edition of the CSR Report has been produced with a focus on reporting Tokuyama's CSR activities in the clearest possible manner. This is our second edition of CSR Report and we at the editing team worked to further enhance the reporting on social commitment.

Year 2008 marks the 90th anniversary of Tokuyama's establishment as well as the initial year of our new Three-Year Plan. Giving consideration to these factors, we have designed this CSR Report to promote an understanding of our initiatives in the lead-up to the Company's centennial.

On the other hand, we realize the need to continue improving the content of the CSR Report as well as the activities themselves. We are happy to accept your frank feedback and suggestions so that we can review your suggestions to produce an enhanced CSR Report in the future.

For inquiries, please contact:

Responsible Care Management Department,  
Corporate Social Responsibility Division

### Tokuyama Corporation

Shibuya Konno Bldg., 3-3-1 Shibuya, Shibuya-ku, Tokyo 150-8383 Japan

Phone +81-3-3499-8478

Fax +81-3-3499-8961

\* To ensure accessibility to as many readers as possible, the CSR Report is also available via Tokuyama's website.

<http://www.tokuyama.co.jp/enviro/>