TOKUYAMA

TOKUYAMA REPORT 2023

Fiscal year ended
March 31, 2023
Integrated Report

OUR VALUE CREATION

Tokuyama will create new value in harmony with the environment by supplying products that address social problems.

Mission

To create a bright future in harmony with the environment, in collaboration with customers, based on chemistry

Vision

Be a value-creative company that places first priority on R&D and marketing

Be a company that never stops challenging new domains while refining and exploiting its unique strengths

Be a company with healthy employees who have healthy families and take pride in their work at their company

Be a company that fosters bonds with people in communities and societies worldwide

Values

Commitment to customer satisfaction as a profit source

A broader, loftier perspective

Employees who consistently surpass their predecessors

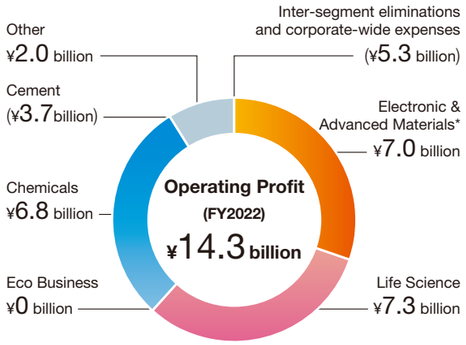
Integrity, perseverance, a playful spirit and boldness

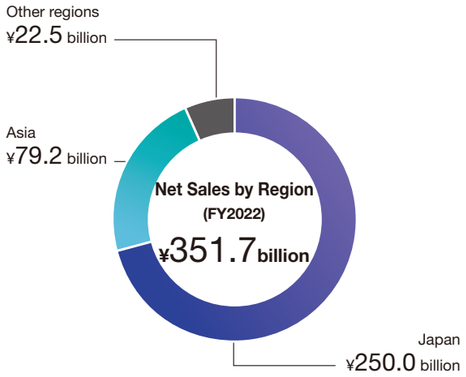
Tokuyama at a Glance

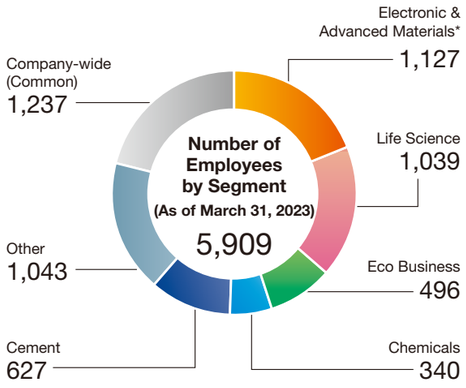
Our product lines and demonstrating prowess in diverse markets

1. CMP: chemical mechanical polishing
2. IPA: isopropyl alcohol

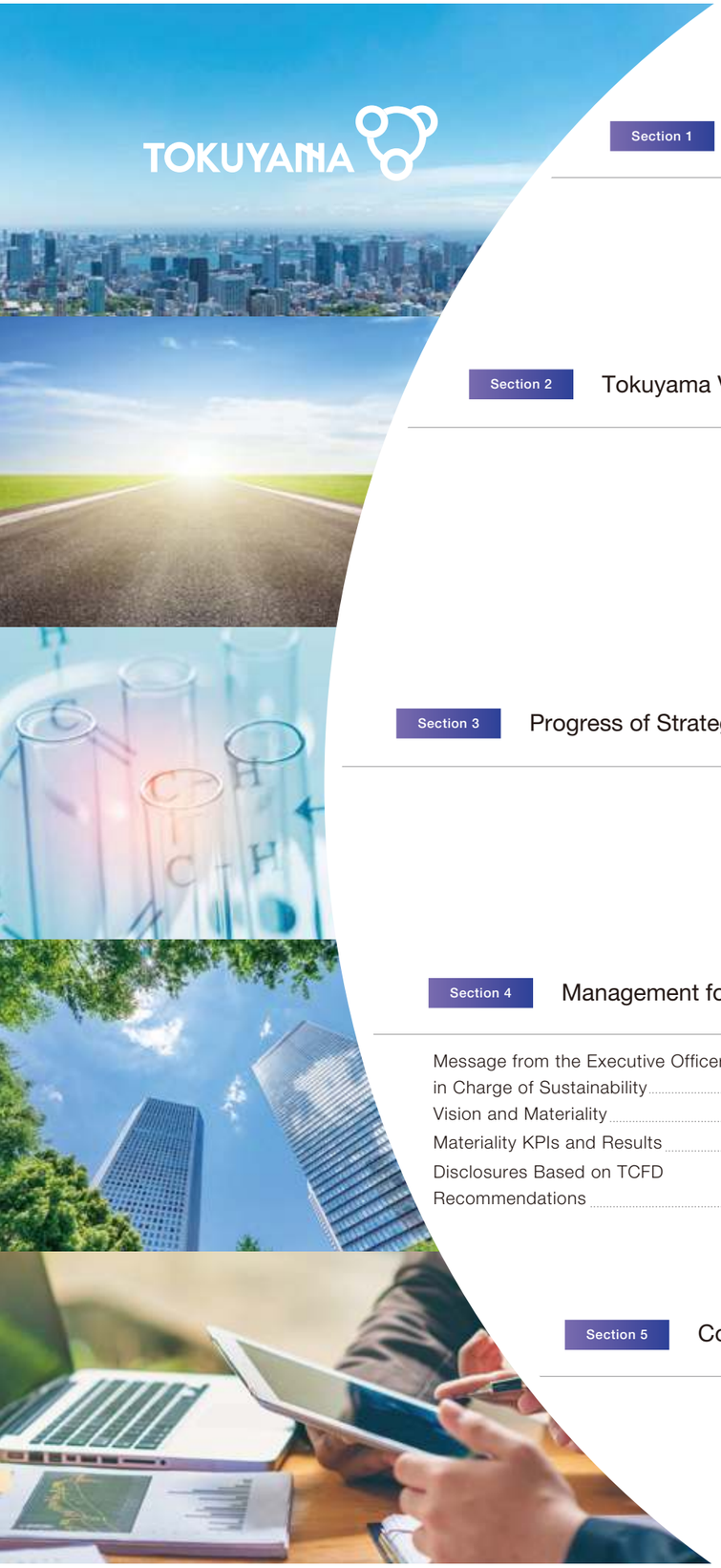
Key Data (FY2022 Results)







*On April 1, 2023, the name was changed to Electronic & Advanced Materials



Contents

Section 1 Tokuyama Value Creation

OUR VALUE CREATION 1
Contents/Editorial Policy 2
The Path to Value Creation 4

Section 2 Tokuyama Value Creation Strategy

Message from the President 6
Value Creation Process 12
Tokuyama's Strengths Supporting Value Creation 14
Improving Value Creation 16
Progress of Medium-Term Management Plan 2025 20
Message from the CFO 22

Section 3 Progress of Strategy by Business Segment

Electronic & Advanced Materials 24
Life Science 26
Eco Business 28
Chemicals 30
Cement 32

Section 4 Management for Sustainable Growth

Message from the Executive Officer in Charge of Sustainability 34
Vision and Materiality 36
Materiality KPIs and Results 36
Disclosures Based on TCFD Recommendations 40
Compliance 43
Stakeholder Engagement 43
Dialogue with External Directors 44
Corporate Governance 46
Risk Management 50

Section 5 Corporate Data

Financial and Non-Financial Highlights 52
Management Team 56
Corporate Data 58

Editorial Policy

The *Tokuyama Report* is published to communicate the Company's management policy and medium- to long-term strategy to stakeholders in a way that is easily understood. When preparing this report, we conducted interviews with investors and a survey within the Company about the FY2022 report. The feedback we received is reflected in our planning. We hope that this report will enable better communication with our stakeholders as well as a deeper understanding of the Tokuyama Group. This report briefly outlines information that is highly relevant to the value creation story. For more detailed IR and/or CSR information, please visit the Company's website.

Period Covered

FY2022 (April 1, 2022 to March 31, 2023)

Some activities and information included relates to FY2021 or earlier or is scheduled for FY2023 or later.

Report Scope

Tokuyama Corporation and consolidated subsidiaries (56 companies)

- If the reported scope is different for some data in this report, the different scope will be cited.
- In principle, entities listed as Tokuyama in this report generally refer to Tokuyama Corporation and the Tokuyama Group.

Reference Guidelines

- The Ministry of Economy, Trade and Industry, *Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation 2.0*
- IFRS Foundation, *Integrated Reporting Framework*
- Global Reporting Initiative, *GRI Sustainability Reporting Standards*
- Task Force on Climate-related Financial Disclosures (TFCD), *Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures*

Information Framework

	Financial	Non-Financial
Overview of Strategy	***Tokuyama Report* (Integrated Report)** This report includes corporate activities for a wide range of stakeholders, covering both financial and non-financial aspects of Tokuyama at present and for the future that we aim to achieve. https://www.tokuyama.co.jp/eng/ir/report/annual_rep.html	
Details and Latest Data	**Investors Website** Useful information for shareholders and investors, organized as an IR Library · Financial summaries · Presentation materials · Annual securities reports · Corporate governance reports, etc. https://www.tokuyama.co.jp/eng/ir/	**CSR Website** Provides more detailed information on Tokuyama's CSR activities https://www.tokuyama.co.jp/eng/csr/ ***Tokuyama TCFD Report*** Outlines initiatives against climate change based on the TCFD's four recommendations: governance, strategy, risk management, and metrics and targets https://www.tokuyama.co.jp/eng/csr/tcfd_information.html ***Sustainability Data Book*** Mainly includes data for understanding today's Tokuyama based on the perspectives of responsible care (sustainability) https://www.tokuyama.co.jp/eng/csr/report/index.html

Cautionary Note on Forward-Looking Statements

This report contains forward-looking statements on the Company's plans, strategies,operating performance and other matters. These forward-looking statements are the Company's assessments based on information available at the time of this report's preparation. Statements in this report are subject to various risks and uncertainties. The Company's actual activities and/or operating performance can differ materially from these forward-looking statements as a result of many factors, including but not limited to changes in economic conditions, the operating environment, demand trends, and exchange rates.

Disclaimer

This report is for information only and is not intended as a solicitation. The Company assumes no liability for any losses due to investment decisions made by relying on forward-looking statements, numerical targets, or other information contained here.

The Path to Value Creation

Historical Background / Social Problems

- World War I (1914 to 1918)
- World War II (1939 to 1945)
- Japanese economic miracle (1955 to 1973)
- Oil shocks (1973, 1979)
- Environmental pollution problems
- Japanese asset price bubble (1986 to 1991)
- Declining birthrate and aging population in Japan (from 1997)
- Digital revolution (from 1995)
- Kyoto Protocol (1997)
- Bankruptcy of Lehman Brothers (2008)
- COVID-19 pandemic (from 2020)
- Adoption of the Sustainable Development Goals or SDGs (2015)

1918– | 1945– | 1960– | 1970– | 1980– | 1990– | 2000– | 2010– | 2020–

Chemicals: 1918 Nihon Soda Kogyo Co., Ltd. established for the domestic production of soda ash. Subsequently began production of calcium chloride, caustic soda, PVC resin, and other materials

Cement: 1938 Began production of cement from byproducts of soda ash. Subsequently changed production process and launched the recycling business in 1999 using cement kilns

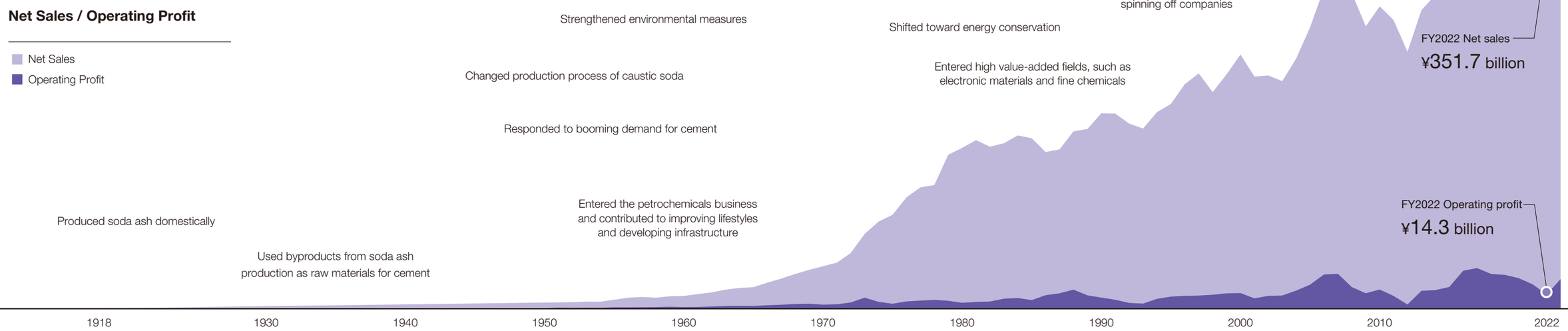
Eco Business: 1967 Began production of ion-exchange membranes for use in salt production from concentrated seawater 2013 Established waste gypsum board recycling business, 2021 Converted this operation into a department

Life Science: 1978 Established dental materials and equipment business, 1982/1983 Established businesses for eyeglass lens material, pharmaceutical ingredients, and diagnosis equipment

Electronic & Advanced Materials: 1984/1985 Began production of semiconductor-grade polycrystalline silicon, high-purity IPA for electronics manufacturing, and aluminum nitride

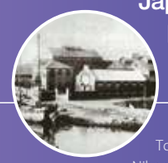
Since our founding in 1918, Tokuyama has worked to accumulate technologies and create new products by developing our inorganic chemicals business, while, from the 1970s, we began addressing social problems by expanding the scope of businesses, mainly in organic and polymer chemistry. We are continuing to refine the technologies that have become the cornerstone of our growth over more than a century, as we strive to create new value that meets the requirements of the coming age.

Net Sales / Operating Profit



Tokuyama Value Creation

Japanese industrial development backed by domestically produced soda ash



Tokuyama was originally established in 1918 as Nihon Soda Kogyo Co., Ltd. by the founder Katsujiro Iwai, succeeding two decades later with the domestic production of soda ash (sodium bicarbonate) used as an ingredient in glassmaking. Tokuyama utilized the byproducts to make the foray into the cement industry. In 1952, the production method for caustic soda was converted into an electrolytic process in response to market changes. The pioneering spirit of the founders, who were instrumental in Japan's industrial development, is the cornerstone of what makes Tokuyama what it is today.

Diversifying businesses to evolve into a comprehensive chemical manufacturer

Armed with a solid management base, Tokuyama made the move to take the advanced technologies we had developed into new industry sectors. In 1964, Tokuyama began production of polypropylene oxide, taking the first steps into the field of petrochemicals. This was followed by entry into a wide range of sectors, including film and construction materials in the 1970s, and electronic materials like polycrystalline silicon to meet the needs of the burgeoning semiconductor industry as well as dental materials and eyeglass lens materials for the healthcare sector in the 1980s.These moves gave Tokuyama a strong foundation upon which to grow into a comprehensive chemicals manufacturer.

More overseas operations underpinning our growth as a global company

The company name was changed to Tokuyama in 1994, marking our expansion overseas with a key focus on Korea, Singapore, China and other countries throughout Asia. In Japan, new Group companies were established, consolidated, and reorganized to further boost the company's operational framework. With initiatives for moving toward a more sustainable society, Tokuyama expanded into the recycling business in 1999 by utilizing cement plants.

Toward a value-creative and solution-providing company

While the economic system reeled from unprecedented changes in 2021—the digital revolution, advancements in DX, inflation on a global scale, the COVID-19 pandemic—Tokuyama took the first steps toward achieving a brand-new vision: transforming from energy-intensive businesses into becoming a value-creative and solution-providing company. With both exceptional technical strengths and proven solutions tailored to customers' requirements, Tokuyama is aiming to become a company that delivers unique value while helping to resolve social issues.

Message from the President

Transforming Tokuyama into a corporate group that contributes to the realization of a sustainable society based on three domains: electronics, healthcare, and the environment

Tokuyama is stepping away from a business structure that is energy intensive to one that is value creative, contributing to resolving social issues through proprietary technologies. Looking ahead to 2030, we are now working on transformation in our business portfolio. President and Executive Officer Hiroshi Yokota will introduce the Group's Vision and medium- to long-term growth strategy, or where we are headed as a Group.

Representative Director, President and Executive Officer

Hiroshi Yokota

Management Approach

Business Always Grows During the Hard Times and Declines During the Easy Times

When managing Tokuyama, my primary concern is to break away from the old, energy-intensive business structure, which requires large capital investment, and to transform Tokuyama into a youthful company that can respond quickly to changes in the business environment and take on the challenge of creating new businesses.

Since our founding in 1918, Tokuyama has continued to grow progressively by supplying basic materials, such as caustic soda, cement, and PVC resin, to a wide array of industries. Throughout our history, employees have come to believe that the company would be secure for many years as long as we adhered to traditional business practices. However, Tokuyama is now facing a historic wave of change. There is a strong requirement to build a new business portfolio that is flexible, one that responds to carbon-neutral initiatives and structural changes in the economy and society. At the same time, with a declining birthrate and an aging population in Japan, it is essential for Tokuyama to grow business globally, not only in the downward-trending Japanese market, but in overseas markets with real growth potential.

For Tokuyama to continue to prosper in the future, it is necessary to restructure. We will consolidate our management structure to include overseas expansion and new businesses, moving away from having standalone businesses, being product and Japan focused, and maintaining the familiar mindset that employees now have. To successfully restructure into a value-creative company, it is critical to include diversity into an organization with employees who are on the same wavelength. I am adamant that it is important to have diversity—employees with different genders, nationalities, values, and lifestyles—to improve our productivity and competitiveness.

Tokuyama's Mission and Value Creation

Becoming a Market-Focused Company That Places the Customer First with Products and Services Based on Market Needs

We have continued to grow by being a product-focused company developing businesses based on our strengths and proprietary technologies. For example, during soda ash production, our legacy business, quicklime (calcium oxide) is created as a byproduct. To capitalize on this byproduct, the Company began producing cement made from quicklime. By utilizing this strategy, we extended our business domains based on our own products. Using our own byproducts was an economic, rational strategy. By integrating our businesses, we strengthened the competitiveness of the Tokuyama Factory, our main factory. I believe that our previous business strategy—energy-intensive businesses based on coal-fired power generation—was sound.

Today, however, the structure of industry is changing due to the digital revolution. Being product focused is becoming outdated now that responding to ESG (environmental, social, and governance) issues is becoming more and more serious. How can we create new products and services that will be demanded by society in the future? How can we create new business models that contribute to economic development while minimizing impact on the environment? Right now is the time when the success or failure of these initiatives will determine the fate of the company, being market and customer focused is vital for developing and supplying products and services that are based on customer needs.

To transform Tokuyama into a company focused on customers and markets, I believe we need to review our management principles, the foundation of our business. In 2021, we redefined our Mission as "To create a bright future in harmony with the environment, in collaboration with its customers, based on chemistry." For realizing this Mission, we established our Vision, or becoming the company that we want to be. We also developed and are disseminating the "four values" that all employees must follow. At the same, we formulated and announced Medium-Term Management Plan 2025, covering the five years from FY2021 to 2025. This plan clearly presents the vision Tokuyama is aiming for and the initiatives for achieving our goals.

I believe that through these initiatives we will convey to both society and employees our management's determination for a sweeping change of course. Our founder, Katsujiro Iwai, had a saying: "Business always grows during the hard times and declines during the easy times."* Doing things the same way does not solve problems. I will continue to lead the

transformation of Tokuyama's business portfolio and our restructuring that is a prerequisite for that transformation.

*"It is in trying times that business grows. On the other hand, if a company is content with maintaining the status quo, business will begin to decline even if conditions are favorable."

Business Portfolio Makeover

For the Electronics, Healthcare, and Environment Domains: Enhance the Share of Consolidated Net Sales from Growth Businesses to 50%

In Medium-Term Management Plan 2025, announced in February 2021, Tokuyama set three pillars as priority issues: Transform the business portfolio, Contribute to mitigating global warming, and Practice socially responsible management. "Transform the business portfolio" is the most important management theme so that we can forge ahead to achieve sustainable growth.

Tokuyama's basic strategy for the future is to focus on creating new businesses that help resolve social issues rather than those business that are based on conventional energy-intensive materials. Our new strategic targets are three business domains: electronics, healthcare, and the environment. While generating sustainable cash flow in the traditional Chemicals and Cement business segments, we will concentrate our management resources on the three growth segments: Electronic & Advanced Materials, Life Science, and Eco Business. We will increase the share of consolidated net sales of these growth business segments to more than 50% by FY2025 and more than 60% by FY2030. In the electronics domain, Tokuyama will capture the top share in high-purity and thermal management materials, while forging ahead with globalization. In the healthcare domain, we intend to become the industry leader in the vision, dental, and diagnostic fields, where we can differentiate ourselves with proprietary technologies. In the environment domain, Tokuyama will boost production capacity for water treatment membranes, grow the waste gypsum board recycling business, and promote recycling photovoltaic panels from the R&D stage, in this way making the environment business a new pillar for the Group's future. In April 2021, we reorganized to build our next-generation business portfolio, adding the Eco Business to Chemicals, Cement, Electronic & Advanced Materials (Electronics), and Life Science (Healthcare) to form five business divisions. In April 2023, we reorganized Electronic Materials and established the Electronic & Advanced Materials Business Headquarters.

Restructuring our business portfolio does not mean that our traditional businesses will be downsized or eliminated. For example, the Cement business is mature, having comparatively small growth potential. However, there is enormous potential for resource recycling. I believe that reexamining existing businesses from the perspectives of electronics, healthcare, and the environment then incorporating those businesses into a new corporate structure is another way of transforming our business portfolio.

We are currently in the third year of Medium-Term Management Plan 2025. We will mobilize the collective strength of the Group to transform our business portfolio, aiming to achieve net sales of 320 billion yen, operating profit of 45 billion yen, and ROE (return on equity) of 11% or more in the final year of the plan (FY2025).

*After a change in depreciation method, we updated the FY2025 targets for operating profit and ROE from 40 billion to 45 billion yen and from 10% to 11%, respectively (announced on April 28, 2023).

Notice Concerning the Revision of Targets for the Final Year of the Company's Medium-Term Management Plan
https://www.tokuyama.co.jp/eng/news/pdf/20230428_02_Release_e.pdf

Priority Issues in Medium-Term Management Plan 2025

Transforming the business portfolio

Increase the share of consolidated net sales from growth businesses to **over 50%**

Contribute to mitigating global warming

Expedite the development/commercialization of next-gen energy technologies; Reduce greenhouse gas (GHG) **emissions by 30%**

Practice socially responsible management

Step up high-priority CSR initiatives to lay the groundwork for growth and to realize our Vision

*Reduction target: Base year FY2019 GHG emissions of approximately 7.26 million tonnes

Transforming the Company to Realize Our Vision

Focusing on Four Themes: "Reform Organizational Culture," "Strengthen R&D," "Promote DX," and "Accelerate International Expansion"

To successfully reach the goals of Medium-Term Management Plan 2025 and realize Tokuyama's redefined Vision, it is essential to promote the four reforms described below.

The first is "Reform Organizational Culture." Tokuyama's history spans more than a century, having developed a wide range of businesses centered on bulk materials. At the same time, the frontier spirit, which should be part of the Group's DNA, has weakened, since the number of employees who focus on stability has risen during our growth. This trend has persisted among executives and mid-career employees who have experienced success in the conventional sense, so there is a tendency to view the adventurous spirit and challenges of younger employees less favorably. However, to pioneer the three new domains—electronics, healthcare, and the environment—we need an aggressive group of people who are fulfilled and satisfied by taking on challenges in unknown fields. I believe that restructuring our business portfolio will change our organizational culture and the current mindset of our employees. I envision a future where a change in awareness will lead to a change in behavior, which in turn will transform our business structure and way of doing business.

For the second theme, "Strengthen R&D," we will encourage customer-oriented R&D (research and development) with marketing as the cornerstone. Over our long history, we have developed and built up a storehouse of technologies that have changed the nature of industry and enriched people's lives. However, many of these technologies have been developed and utilized only for our current businesses, so it is essential for us to always consider what we can do with our technologies in the new domains—electronics, health, and the environment—then convert those ideas into real-world products and services. There is a limit to what we can do on our own. To quickly provide the new value that society will demand in the future, we will acquire the functional strengths and development skills that we need through collaborations with other companies, open innovation, and M&As. By promoting marketing-driven R&D, we will transform into a value-creating company.

The third theme is "Promote DX." In addition to improving our operations by introducing digital technology, Tokuyama will utilize AI and IoT (Internet of things) in various areas, including by upgrading supply chain management systems and boosting productivity at our plants. The goals are to fundamentally change the way we work and to strengthen our competitiveness. We also intend to utilize materials informatics (MI) to accelerate R&D.

For the fourth theme, "Accelerate International Expansion," we will continue growing overseas production and sales, while developing our international markets, aiming to become a global company with growth potential Tokuyama currently has manufacturing and sales bases in eight countries and regions around the world, mainly in Asia. The percentage of overseas sales in FY2022 was 29%, and we plan to increase this to 50% or more in FY2030. We have formed joint ventures with

Formosa Tokuyama Advanced Chemicals Co., Ltd. (FTAC) in Taiwan and STAC Co., Ltd. (STAC) in Korea, both leading companies in their countries, so that we manufacture and sell high-purity IPA for the electronics industry where the demand is.

Contribute to Mitigating Global Warming

Becoming Carbon Neutral by Decarbonizing through Developing and Supplying Environmentally Friendly Products

Tokuyama is one of the largest CO_2 emitters among Japanese companies. In addition to CO_2 from our own power plants, for example, CO_2 is emitted from our core soda ash operations. Much CO_2 is also produced when limestone and coke are calcined in lime furnaces. As well, ships that transport limestone burn heavy oil. In other words, our current business structure is the basic reason for the amount of CO_2 that we generate.

On the other hand, global industry is making major strides toward achieving carbon neutrality by 2050. For Tokuyama to remain a sustainable corporate group, it is essential to quickly determine a carbon-neutral/decarbonized business model while consistently producing and supplying basic materials that support industry, including caustic soda, PVC resin, and polycrystalline silicon. Given this recognition, we have set "Contribute to mitigating global warming" as a priority issue in our Medium-Term Management Plan 2025. By decarbonizing while developing and supplying environmentally friendly products, we intend to reduce GHG (greenhouse gas) emissions by 30% in FY2030 compared with FY2019 levels, putting us on a strong path for carbon neutrality.

One specific initiative for becoming carbon neutral is on track: converting our captive power plants to biomass co-fired generation. Using palm kernel shells (PKS), among other waste biomass, we have started to convert one of the Tokuyama Factory's four power plants to biomass co-fired generation and are set to increase, from FY2025, the percentage of power from biomass co-fired generation. Also, the Shunan Industrial Complex Decarbonization Promotion Council, a public-private organization, has been studying a carbon-free supply chain for ammonia, a fuel for in-house power generation. We have a plan to utilize over one million tonnes of ammonia annually at the Shunan Complex (Yamaguchi Prefecture) by 2030.

In addition to developing and supplying environment-friendly products, we are developing CCU (carbon capture and utilization) technologies to recycle CO_2 into raw materials for chemical and other products while extending our environmental management. We intend to keep contributing to a sustainable global environment and industry by establishing an environmentally conscious business model that is not heavily dependent on fossil fuels.

Practice Socially Responsible Management

Aiming to Realize our Vision through Materiality Initiatives

Tokuyama has identified 10 key CSR material issues in Medium-Term Management Plan 2025 as an action plan to realize our Vision, redefined in 2021. These CSR material issues include "Helping to fight global warming" and "Conserving the environment." We believe that a business structure with less environmental impact—from transforming our business portfolio—will result in improved CSR management. One initiative for security and disaster prevention as well as occupational safety/health is encapsulated in the material issue "Preventing accidents and preparing for disasters," a fundamental and important theme for our business operations.

To deepen our relationship with society, we have positioned "Developing human resources," "Promotion of diversity and career fulfillment," and "Promotion of physical & mental health" as important issues. New businesses that change society for the better do not come from staying the course; new products and services are born from a vibrant organizational culture with diverse employees and values that adapt over time. It will be necessary for us to hire and promote a diverse workforce. New employees will have different genders, nationalities, races, and values, and we should support their development through internal and personnel management systems. Transforming our business portfolio should go smoothly if we build an organization that welcomes diversity and offers job satisfaction.

In the past, CSR was seen as making a social contribution separate from a core business. Today, however, I view CSR initiatives as inseparable from the company's Mission, social obligation, and growth strategy. I believe that sincerely addressing material management and social issues will be the predominant driving force behind our sustainable growth.

A Message for Our Stakeholders

My Paramount Responsibility as President and Executive Officer is to Transform Tokuyama into a New Company

My most important responsibility as President and Executive Officer is to transform Tokuyama into a new company. This statement really says it all. We will change the mindset of our employees, the organizational culture, systems, and business structure. The Company will consistently take on new challenges, while adapting to the times and communicating Tokuyama's unique value to industry and society. I believe that this is the only way to live up to the trust and expectations of our stakeholders.

We have a mountain of work ahead of us, including streamlining our traditional technologies through DX, R&D and capital investment in growth businesses, on top of developing and growing our global operations. Improving our financial position and further enhancing shareholder returns are also important management themes. Given the limited management resources we have, it is not possible to implement all of these measures in a comprehensive way, so we must identify businesses and initiatives that we need to focus on now by backcasting from where we want to be in 2030, and to optimally allocate funds, mainly to growth areas.

Although the business environment is likely to remain uncertain with rising geopolitical risks associated with Russia's invasion of Ukraine, soaring raw material prices, and fluctuating exchange rates, Tokuyama is determined to promote assertive, bold management under a solid governance structure to achieve sustainable growth and maximize corporate value into the future. We sincerely ask for the continued support of our stakeholders.

Value Creation Process

The Tokuyama Group is contributing to resolving social issues through business operations and to creating a sustainable future, in line with our Mission. These steps are highlighted in the Value Creation Process.

Management challenges

Society	Japan	Planet Earth
Accelerated change in industrial structure, rapid digital revolution	Domestic demand shrinkage, growing health consciousness	Growing environmental consciousness, environmental regulatory tightening

Mission

To create a bright future in harmony with the environment, in collaboration with customers, based on chemistry

Vision

- Be a value-creative company that places first priority on R&D and marketing
- Be a company that never stops challenging new domains while refining and exploiting its unique strengths
- Be a company with healthy employees who have healthy families and take pride in their work at their company
- Be a company that fosters bonds with people in communities and societies worldwide

Values

- Commitment to customer satisfaction as a profit source
- A broader, loftier perspective
- Employees who consistently surpass their predecessors
- Integrity, perseverance, a playful spirit and boldness

Financial Capital

Stable financial base

Total assets: **¥478.3 billion**

Net assets: **¥241.6 billion**

Rating*: **A**

*R&I Issuer Rating

Manufacturing Capital

Regionally oriented manufacturing base

Capital expenditures: **¥35.6 billion**

Number of production plants:

20 in Japan, 5 overseas

Intellectual Capital

Unique technologies and manufacturing processes developed over more than a century

R&D expenses: **¥13.6 billion**

Number of patents held: **2,537**

Human Capital

Human resources with a common sense of values

Turnover*: Under **1%**

Percentage of female managers: **4.7%**

*Non-consolidated

Social Capital

Long valued customer and partner network

Number of countries and regions with sales[1]: **40 countries**

Amount subsidized by Tokuyama Science Foundation[2]:

Approx. ¥1.23 billion

Number of times of stakeholder engagement: **144**

1. Non-consolidated
2. Cumulative total for FY1998 to FY2022

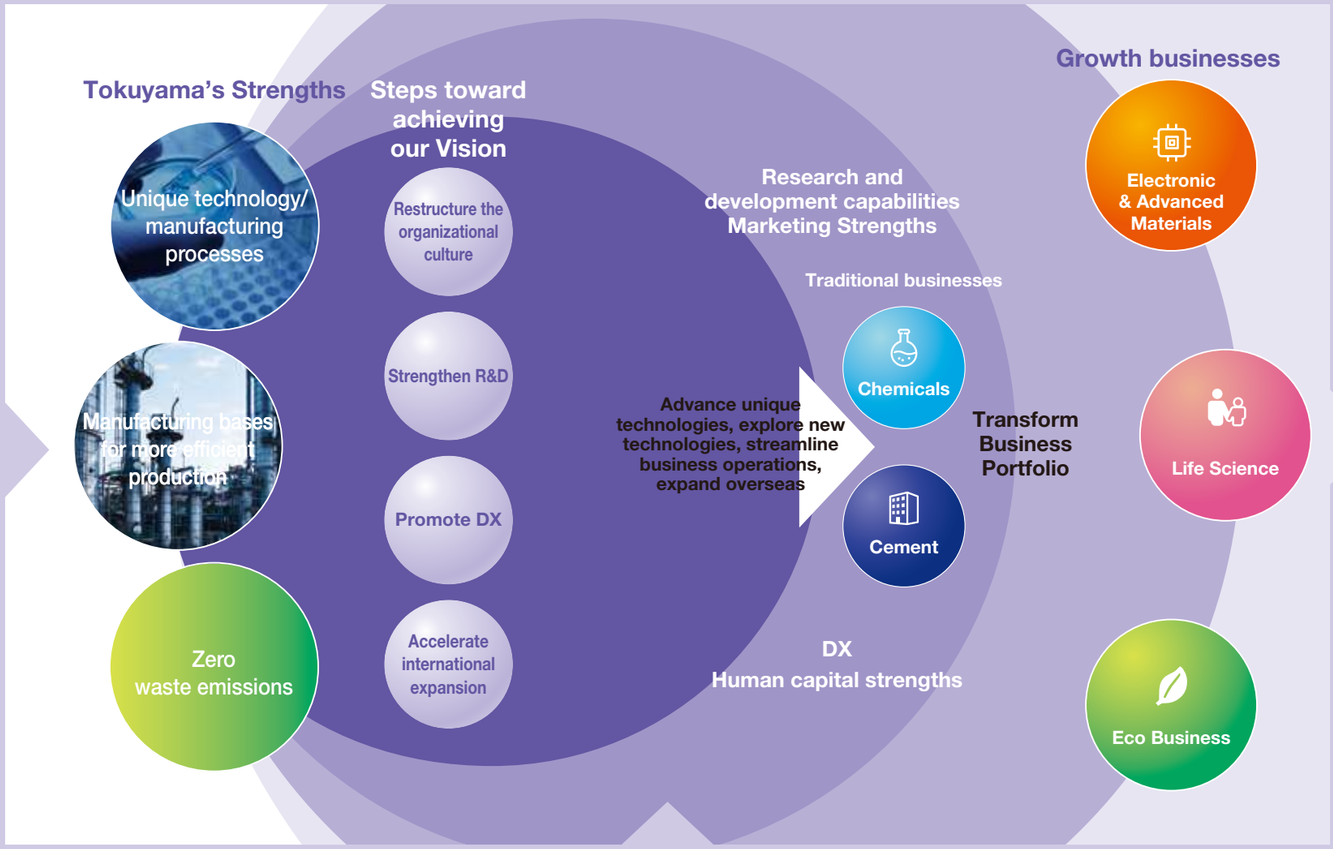
Natural Capital

Efficient use of stable supply of resources

Energy input: **57,300 TJ**

Water resources input*: **41,932,000 m³**

*Excluding seawater used for cooling



Supply products and services required throughout society

Maintain performance of advanced electronic equipment and energy savings through:

- Semiconductor miniaturization
- Higher semiconductor performance

Improve quality of life with better health and preventive care

- Better performing eyeglass lenses
- Enhanced dental care
- Support clinical examinations for faster and more accurate diagnosis and treatment

Contribute to a closed-loop society by recycling waste

- Develop a closed-loop society through waste recycling
- Contribute to mass-processing of waste
- Conservation of aquatic environments with initiatives such as waste liquid desalination

Outputs (FY2022 results)

Net sales	**¥351.7 billion**
Consolidated operating profit	**¥14.3 billion**
Current net income attributed to shareholders of the parent company	**¥9.3 billion**

FY2030 target

Percentage of consolidated net sales from growth businesses	**60% or more**
Percentage of consolidated overseas net sales	**50% or more**
GHG emissions	**30% reduction** (compared with FY2019 levels)

CSR Priorities

- Helping to fight global warming
- Conserving the environment
- Preventing accidents and preparing for disasters
- Developing products and technologies that address social issues
- Improved chemical management and product safety
- Engaging with local communities
- Promoting CSR procurement
- Developing human resources
- Promotion of diversity and career fulfillment
- Promotion of physical/mental health

Toward Tokuyama's Sustainable Growth

Tokuyama's Strengths Supporting Value Creation

Tokuyama's technologies are the foundation for creating value, over the course of more than a century

Along with the development of the Japanese chemical industry, Tokuyama has added cement and chemical products to the product lineup. The Company is currently developing businesses based on our proprietary strengths in technology, mainly in the advanced electronic materials that support cutting-edge semiconductor manufacturing, as well as the life sciences and the environment.

Tokuyama has manufacturing bases for production worldwide: in eight countries and regions around the world, mainly in Japan and Asia. In addition to making production more efficient at every site, the Company is reducing waste and recycling, aiming for zero waste emissions.

Separation Technology using Ion-Exchange Membranes

In the 1960s, the Company was the first in Japan to commercialize ion-exchange membranes. Today we offer separation technology for an array of applications that use membranes that are resistant to chemicals as well as selective permeation, allowing only the target substance to pass through. This advanced technology is used in a wide range of industries, including the production of salt from seawater, the recovery of specific valuable materials, refining and producing food such as wine and soy sauce, as well as the production of acids and alkali from neutral salt waste liquids.

Ion-exchange membrane

Molecular Design / Organic Synthesis Technology

Photochromic materials used for photochromic lenses require molecular technology to design and control the chemical structure for a specific purpose, such as color tone and fading as well as advanced organic synthesis technology to create specific substances. The Company excels in all of these technologies, having a strong track record in the eyeglass lens materials sector. In the future, these technologies will be extended for use in a wider range of applications.

Eyeglass lens materials

High Purity / High-Sensitivity Analysis Technology

Our polycrystalline silicon for semiconductors, a raw material for silicon wafers, has the highest level of purity in the world. In addition, high purity IPA for the electronics industry, used for precision cleaning of semiconductor wafers and electronic devices, is characterized by a low level of impurities due to a unique manufacturing method. The Company's high level of purity and high-sensitivity analysis technology, that does not overlook minute amounts of impurities, facilitates the development and manufacturing of these products.

High-purity polycrystalline silicon

Direct Nitriding / Reductive Nitriding Technology

The Company's high-purity aluminum nitride has the world's top market share. Their excellent sinterability (hardens easily) is due the reduction nitridation method a proprietary manufacturing process. This material is highly valued for its thermal conductivity and thermal expansion coefficient, far exceeding competitors' products, and is used as a material for semiconductor heat dissipation substrates and semiconductor manufacturing equipment.

Thermal management materials

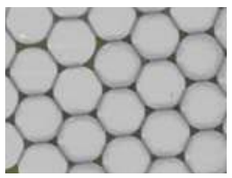
Waste Treatment Technology

Since our beginning, the Company has worked hard on effectively using and recycling waste in the cement manufacturing process, as well as accepting large amounts of other waste, such as waste plastic, from sources outside of the Company. The cement kiln's combustion temperature is extremely high (1,000 to 1,800℃), so combustible materials are burned completely and the noncombustible materials can be used as substitute raw materials for cement. This processing technology leaves no residue.

Resource recycling

Powder Control Technology

Using technology gained through years of experience, we provide advanced powders, such as silica and aluminum nitride, for filling in resins and producing high-level functionality for composite materials by applying certain technologies including particle shape control and the surface modification of powders. These techniques are developing quickly, and the Company is at the frontier of the commercialization of powders with unique properties, including spherical aerogels and hollow silica.


Sunseal™

Tokuyama Factory

The Tokuyama Factory, located in Shunan City, Yamaguchi Prefecture, Japan, where Tokuyama was founded, is mainly responsible for producing chemical products, cement, advanced electronic materials, and products for eco-businesses. Starting with the production of soda ash, the company's original business, we expanded the product range, while responding rapidly to changes in social and economic requirements. What sets us apart from our competitors is the technology we have developed and the knowledge gained from every business; materials, including by-products; and the integrated, cooperative use of energy. These factors are the source of Tokuyama's market dominance. The Factory has a zero waste emission rate of 99% or more from processing waste at cement plants. In recent years, we have strengthened cooperation with nearby companies and local government, and are accelerating the decarbonization of the Shunan Industrial Complex.

Tokuyama Factory aerial photo

Kashima Factory

The Kashima Factory, Kamisu City, Ibaraki Prefecture, Japan started operations in 1985 as a manufacturing plant for life science products. Using organic synthesis technology, accumulated over many years as the company's core technology, we have developed more efficient production in a wide range of fields, including APIs and intermediates, eyeglass lens materials as well as dental materials and equipment. We provide these products to more than 70 countries and regions around the world. In particular, photochromic materials that change color in response to ultraviolet rays and dental materials and equipment manufactured by Tokuyama Dental Co., Ltd. have a strong presence in the global market. The Company is also working on reducing the environmental impact of manufacturing processes, and in 2023 we installed solar panels at this facility to utilize more renewable energy.

Kashima Factory building with solar panels installed

Tokuyama Chemicals (Zhejiang) Co., Ltd. (China)

Tokuyama Chemicals (Zhejiang) Co., Ltd., a subsidiary in China 100% owned by Tokuyama, was established in 2005 to fill the robust demand from local customers. This company produces advanced electronic materials, including fumed silica, high purity chlorosilane, and high purity chemicals for the electronics industry. In particular, fumed silica, with a broad range of applications, such as rubber and elastomers, maintains a solid share of the Chinese domestic market, and its superb quality is highly appreciated by our customers. This company will complete construction work in FY2023 to increase production of a hydrophobic grade of fumed silica, for which demand is expected to grow. Going forward, Tokuyama Chemicals (Zhejiang) will satisfy customer requirements with a strong production system that supports the competitiveness of local production and the consistent supply of products.

Tokuyama Chemical (Zhejiang)

Formosa Tokuyama Advanced Chemicals Co., Ltd. (FTAC) (Taiwan)

The global semiconductor industry is expected to continue growing due to the spread of 5G and the penetration of AI. Demand for the chemicals essential for precision cleaning semiconductors and electronic components is also intensifying. In light of these trends, in October 2020 the Company established and took a 50% stake in FTAC, a joint venture in Kaohsiung, Taiwan that manufactures and sells high purity IPA for the electronics industry. Together with Taiwan Tokuyama Corporation, also a manufacturer of high purity IPA, the Company has built a production and supply system for fulfilling local demand in the Taiwanese semiconductor market. FTAC will grow and intensify the business for advanced electronic materials in Taiwan by leveraging our strengths in integrated production from raw propylene.

FTAC

Marketing Strengths

Fortifying customer-oriented marketing, refining Tokuyama Group's unique technologies to create new value

Director, Managing Executive Officer, General Manager of the Research and Development Division
Fumiaki Iwasaki

Tokuyama's R&D has two "wheels." The first wheel is development groups under business divisions that are directly connected to existing businesses, and the other wheel is the R&D Division responsible for strategic medium- to long-term themes. In Medium-Term Management Plan 2025, the Company has set one part of the Vision as "being a value-creative company that places first priority on R&D and marketing." The mission of the R&D Division is to reinforce Tokuyama's technological strengths by cultivating unique technologies and acquiring new ones. The overall goals are to create new value in growth businesses and for R&D to become the driving force for transforming the business portfolio.

In the past, the Company tended to be focused on the development of existing products and was softer on marketing. There are many definitions of marketing, but generally speaking, marketing means "creating a system that sells and selects products and services (that makes customers want to buy them)." We believe that R&D in a company boils down to "the act of creating products that customers want to buy." So, the Company established a specialized marketing organization under the R&D Division in April 2021 and strengthened this system for marketing that anticipates market needs and technological change. Today, based on information gained through marketing, the Company is evaluating a new business model: using the Group's unique technologies to create ideas for researching and developing new business. For example, our silica-based products have strengths in powder control technology, so the Company is developing new applications, including cutting-edge semiconductor materials and cosmetics. The Company has already begun making some sample shipments.

To capitalize on high-purity technology for semiconductor industries, it is necessary to improve our analysis technology. Tokuyama Taiwan Corporation, an R&D center in Taiwan, along with the Tsukuba and Tokuyama research laboratories in Japan, is now improving the ability to analyze trace impurities in semiconductor materials using new analytical equipment. For Tokuyama to steadily capture opportunities for growth in the semiconductor industry, we have a system in place that supports business growth through technology.

Technical human resources are essential for the successful transformation of organizational culture. To create new value in new markets, the Company will cooperate with external organizations, in industry, academia, and government, as well as recruit career professionals.

Focusing on new applications—Developing silica-based products for cosmetics—

The mission of the Marketing Group is to contribute to achieving the business strategies of Medium-Term Management Plan 2025 as well as formulating and executing of the Group's technology strategy. The Group marketing teams anticipate market requirements and technological trends using specialists from each business field. To develop new applications for silica-based products, the Group participated in exhibitions for cosmetics in the United States, the EU, and Japan. We exhibited cosmetics formulated from the Company's products by showing visitors to the exhibitions the outstanding characteristics of these cosmetics, such as their smoothness. The Group will capitalize on the strengths of our silica-based products by anticipating the demand to replace plastic microbeads, now being restricted to help protect the environment.

Exhibition in New York

Research and Development Capabilities

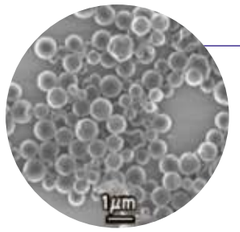
Improving and strengthening corporate development centers

Opened the Tsukuba Second Research Laboratory

The Company will open the Tsukuba Second Research Laboratory in the fall of 2025 to transform the business portfolio and to strengthen R&D for the new domains: electronics, healthcare, and the environment. The Tsukuba Second Research Laboratory will receive some of the roles of the existing Tsukuba Research Laboratory as well as conduct R&D in the healthcare field, centered on developing medical materials and diagnostic reagents, and in the environmental field, including ion-exchange membranes used in water electrolysis to produce hydrogen.

For its part, the Tsukuba Research Laboratory will focus on R&D in the electronics domain, centered on next-generation semiconductor-related materials, while retaining R&D for eyeglass lens materials as well as dental material and equipment made by Tokuyama Dental Corporation. Tokuyama also plans to install pilot equipment at all research laboratories to build a development approach that responds quickly to customers' needs. As a result, the two research laboratories will have an R&D system with about 300 people aiming to become a unified R&D base that creates new value by integrating technology and expertise in a wide range of fields, including organic and polymer chemistry, biotechnology, and inorganic chemistry.

Tsukuba Second Research Laboratory exterior



Silica Developed Products

Strengthening the Tokuyama Research Laboratory

The Tokuyama Research Laboratory, our R&D center in western Japan, takes advantage of being located on the site of the Tokuyama Factory to research and develop new materials and technologies, while working closely with business divisions. This research laboratory, with a key responsibility for using DX for R&D, is working to speed up research and development by utilizing the latest digital technologies, such as materials informatics. At the Analytical Science Department located in this laboratory, we are refining our own unique high sensitivity analysis technology and improving the overall ability to analyze trace impurities in the advanced electronics device field, including ultrahigh purity polycrystalline silicon and chemicals for advanced semiconductor manufacturing processes.

Research at Tokuyama Taiwan

The Taiwan Research Laboratory, established in 2018 as the Group's first overseas R&D center, has been growing through stages, first becoming a local subsidiary then full-scale operations in December 2022 as Tokuyama Taiwan. As a company responsible for both sales and R&D, this center jointly develops products with the Industrial Technology Research Institute (ITRI) of Taiwan, Tokuyama's partner since the time of the Taiwan Research Laboratory, and is working on new business development in Taiwan. The number of personnel is increasing, and a new cleanroom will start operating in July 2023. Through R&D at the cutting-edge of the semiconductor industry, this center will hone our technological strengths and nurture human resources as well as bolster their technical support for customers looking toward the growth of the semiconductor industry.

In the healthcare field, Tokuyama Taiwan launched a health food business in Taiwan in January 2023 after developing a brand name called Vitura—combining the words *vivid* and *natural*—selling health food supplements through the Vitura website in Taiwan.

Health food products sold in Taiwan

Strengthening Open Innovation

To speed up our R&D, the Group conducts joint research with universities in and outside Japan, as well as with national research institutes. In Taiwan, where the semiconductor industry is concentrated, the Group has worked the Industrial Technology Research Institute (ITRI) of Taiwan since 2018 through our contact point Tokuyama Taiwan, which is responsible for research and development. We are continuing to work on technological developments for the miniaturization and sophistication of semiconductors. In recent years, we firmed up partnerships in other fields than electronics by jointly developing useful technologies in the healthcare field, and by working on next-generation technology themes in the environmental field.

Improving Value Creation

DX

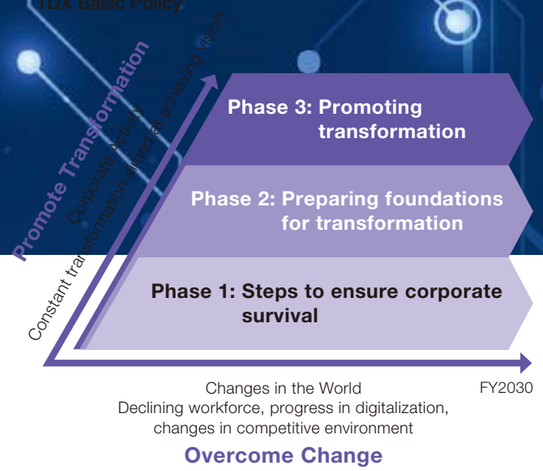
DX (Digital Transformation) at Tokuyama

For Tokuyama, DX is not simply about streamlining operations by using digital technology. We think of DX (TDX*) as using the power of digital technology to help restructure our organization and operations to achieve our medium- and long-term goals that will transform the Company's business portfolio. We are using AI and big data to ramp up our R&D, as well as to improve supply chain management. At the same time, we are using digital technologies in our corporate and sales departments to expedite decision-making and to visualize and pass on expertise.

The DX Promotion Group was established, in April 2021, and the key people who will lead the transformation were assigned to each department. The Company has established a system to accelerate DX initiatives from the perspective of overall optimization. By steadily executing a multifaceted DX strategy, Tokuyama will create new business models that anticipate the changing times.

*TDX: Tokuyama's name for DX

TDX Basic Policy



TDX Overview and Initiatives by Area

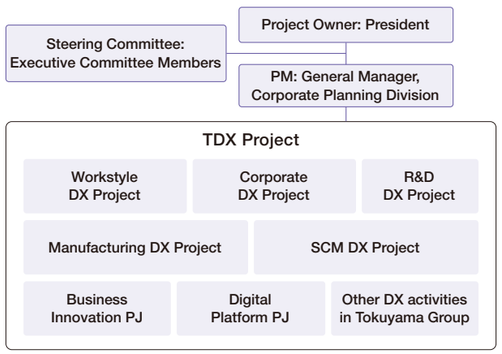
Tokuyama is now concentrating management resources on Medium-Term Management Plan 2025, which ends in FY2025. Under this medium-term plan—based on the idea of building a new business portfolio where businesses in the domains of electronics, health, and the environment account for more than 50% of sales—the Company has set using DX as a management theme for restructuring. Tokuyama will invest up to 10 billion yen over the five-year period covered by the plan and will invest the resulting cash and human resources into the three growth business domains for higher growth and to improve corporate value.

Eight categories have been set for the development of DX, such as manufacturing, workstyles, R&D, and business transformation. A project promotion team has been set up for each category to design and put into place specific initiatives. In manufacturing DX, digital technology is used to improve plant management and to stabilize operations, with the goal of making factories "smarter."

Image recognition technology and AI are used to improve quality traceability throughout all processes, from raw materials to products. Workstyle DX focuses on building an efficient, comfortable work environment for going paperless, while R&D on DX focusses on innovative new materials using materials informatics (MI) and information sharing among researchers. For these initiatives, the Company has set 15 quantitative targets to be achieved by FY2025, and we are working hard to achieve them.

Tokuyama was designated as a DX certified business operator by the Ministry of Economy, Trade and Industry (METI) in January 2022 in recognition of transforming the Company through DX. Tokuyama will continue to improve productivity, enhance functionality, and speed up corporate initiatives by utilizing data and digital technology, with the goal of becoming a corporate group that grows sustainably.

TDX Promotion System



DX Certification (Acquired January 2022)

Digital Transformation Certification

Quantitative Target: DX Promotion Index
Improve to 3.5 points by FY2025 (perfect socore of 5 points)

FY2020 0.80 pts. FY2022 **2.43** pts.

(Average score of 2.04 points for large Japanese corporations)

*DX Promotion Index: Simplified self-diagnostic metrics for promoting digital management reforms (formulated by the Ministry of Economy, Trade and Industry, Japan)

Human Capital Strengths

Our Approach to Human Capital

Tokuyama sees employees as indispensable for sustainable growth because they are the most important "management capital." Employees, or human capital, need the courage to change themselves, the courage to change the system, and the courage to take on challenges in new fields in order for us to transform our business portfolio and provide solution-oriented products and services in the global market. The Company expects and supports the growth of employees who embody the "four values" set out in our Vision.

The Tokuyama Group Human Resources Policy states clearly what the company expects of executives and employees who will realize our Vision, as well as the direction for growth. This policy includes 10 articles as the basic principles of the human resources system and our policies, and underscores our maximum support for the success of executives and employees.

In FY2022, we developed a formal Human Recourses Management Strategy that links to our Medium-Term Management Plan 2025. This strategy includes initiatives such as collaboration with business divisions, the revitalization of human resources accustomed to Tokuyama, proactive recruitment, retention, and the development of strategic human resources.

Investing in Human Capital

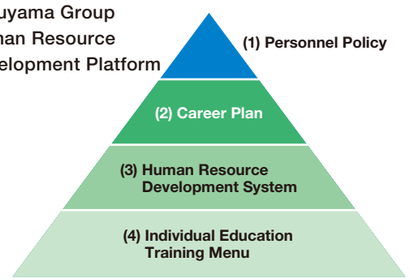
Tokuyama has set up training programs to foster and strengthen human resources, the source of our corporate competitiveness, and to help improve the next generation of employees.

In April 2022, we developed and released the Tokuyama Group Human Resource Development Platform within the Company. This platform includes and aligns the types of employee that the Company expects and the skills required for each type of employee. The platform is also used for guidelines that help develop current job skills, as well as the skills required for career development.

While nurturing the advanced engineers who support business execution, the Company is focusing on global human resources and conducting training for the skills necessary for the global market. In addition, we reviewed the content and restarted next-generation leader training (NBL training) in FY2018 to cultivate the managers, at an early stage, who will be responsible for the future development of the Company.

The human resources system that supports the goals of Tokuyama's Vision was introduced ahead of Medium-Term Management Plan 2025, and assessing behavior in relation to the "four values" has been added to the evaluation items for human resources.

Tokuyama Group Human Resource Development Platform



Initiatives for Revitalizing the Organization

In FY2022, the Company examined our job rotation system and organized personnel information using a talent (HR) management system. And in April 2023, we established HRBPs (Human Resource Business Partners) in growth business divisions to bolster cooperation between business divisions and the Human Resources Division. The Company encourages individual growth, including through job rotation, as well as placing the right people for restructuring the business portfolio based on training programs from the career development system.

Tokuyama's promotion of diversity creates an environment where all employees can thrive and be more assertive, emphasizing diversity of knowledge (knowledge and wisdom) as well as improving productivity through workplace reforms for more comfortable and satisfying work. For the active participation of women, the Company has formulated an action plan in line with the Act on the Promotion of Women's Active Engagement in Professional Life. We are working hard to achieve several targets, such as the percentage of women in management. The Company, to employ more people with disabilities, intends to reach the legally mandated employment level, and we are working to improve the work environment by, for instance, making offices and plants barrier free. In addition, the Company has started new initiatives, such as opening You You Terrace, a place of employment for people with disabilities, and we founded an agricultural corporation, Tokuyama You You Farm Co., Ltd. to support the independence of people with disabilities and contribute to local communities. As well, Tokuyama received Platinum Kurumin Certification from the Minister of Health, Labour and Welfare in July 2022, as an excellent child-rearing support company that is improving the work-life balance of employees.

The Company uses health management to encourage better mental and physical health of employees and their families and for a more comfortable work environment. In recognition of the management of health and productivity, the Company has been certified by White 500 as an outstanding Health and Productivity Management Organization (Large Enterprise Category) for two years in a row and as a Health and Productivity Stock for the first time.

健康経営銘柄 2023 Health and Productivity

2023 健康経営優良法人 Health and productivity ホワイト500

Progress of Medium-Term Management Plan 2025

Transform Business Portfolio

Increase growth businesses' share of consolidated net sales to over 50%

FY2021-25 Plans

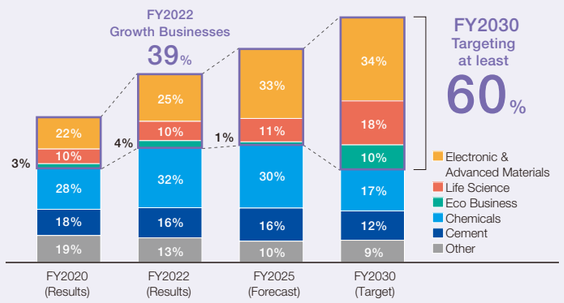
- Redefine/reorganize growth businesses around the three themes of electronics, healthcare, and the environment, and proceed to move ahead with expanding them
- Chemicals and cement businesses to promote increased efficiency while generating sustainable cash flows

Priorities and Initiatives

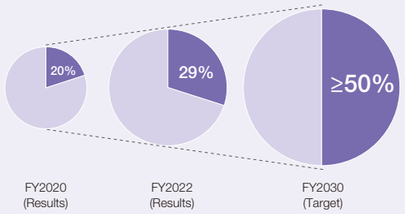
Technology	Pursue added value and promote technological differentiation by collaborating more with external partners
Efficiency Gains	Pursue company-wide operational efficiency, mainly through DX
International Expansion	Expand operations in growing overseas markets

Target Business Portfolio

Breakdown of Consolidated Net Sales by Business



Breakdown of Consolidated Overseas Net Sales



FY2020 was created using reference values that include the financial impact of the current Accounting Standard for Revenue Recognition, etc.

pp. 6–11 | Message from the President
pp. 24–33 | Progress of Strategy by Business Segment
pp. 44–45 | Dialogue with External Directors

Contribute to Mitigation of Global Warming

Expedite development/commercialization of next-gen energy technologies
Reduce GHG emissions 30% by FY2030*

*Reduction target: GHG emissions of approximately 7.26 million tonnes base year FY2019

pp. 34–35 | Message from the Executive in Charge of Sustainability
pp. 40–42 | Disclosures Based on TCFD Recommendations
pp. 52–55 | Financial and Non-Financial Highlights

Practice Socially Responsible Management

Step up high-priority CSR initiatives to lay the groundwork for further growth and realize our Vision

pp. 36–39 | Vision and Materiality
pp. 50–51 | Risk Management

Progress toward Achieving Targets

KPI	FY2020 results	FY2021 results	FY2022 results	FY2025 targets[2]	Keys to achieving target
Net sales (billion)	259.2[1]	293.8	351.7	320.0	Maintain growth while transforming portfolio
Operating Profit (billion)	30.9	24.5	14.3	45.0	Growth toward FY2025
Growth business net sales growth rate (CAGR)[3] (%)	—	19.9	20.1	≥ 10	Strengthen R&D, accelerate international expansion
ROE (%)	13.4	13.2	4.1	≥ 11	Balance efficiency of shareholders' equity and financial base

1 FY2020 net sales are approximate amounts based on application of Accounting Standard for Revenue Recognition, etc., and are listed as reference values
2 Due to changing the depreciation method, the targets for operating profit for FY2025 (target) were updated from 40 billion yen to 45 billion yen and ROE was changed from 10% to 11% (announced April 28, 2023).
3 CAGR (compound annual growth rate): The annual geometric mean rate calculated from the growth rate over multiple years

Progress in FY2022

To transform our business portfolio, we are investing management resources in promoting international expansion as well as three growth business domains: electronics, healthcare, and the environment. In FY2022, net sales increased year on year due to aggressive actions taken to adjust the sales prices of chemicals, cement, and semiconductor-related products in response to soaring raw material and fuel prices triggered by Russia's invasion of Ukraine. The growth rate of sales (CAGR) for growth businesses was 20.1%, far exceeding the target of 10%. On the other hand, despite passing on raw material and fuel costs through sales price adjustments, operating profit fell due to higher logistic costs and a decline in overseas market conditions for chemical products. ROE also fell below the previous year's level.

Initiatives for Business Portfolio Transformation

High-Purity IPA for the Electronics Industry

Start of shipments from Taiwan JV factory and construction of South Korea JV factory

Formosa Tokuyama Advanced Chemicals Co., Ltd. (FTAC) is a joint venture with Formosa Plastics Corporation for the production of high-purity IPA for Taiwanese semiconductor manufacturers. Commercial operation has begun and customer approval is progressing smoothly. Our intention is to begin full-scale operations by the end of FY2023. Similarly, STAC Co., Ltd. (STAC) was established in South Korea as a joint venture with SK Geo Centric Co., Ltd. (SKGC). Construction of the factory in South Korea is already underway, and work is going smoothly for the start of operations in summer 2024. We intend to put the operations of these two plants on track as planned, which will help transform our business portfolio and increase the percentage of net sales coming from overseas.

Groundbreaking ceremony at JV factory in South Korea

Dental Materials and Equipment

Expansion of production capacity

At the Kashima Factory, a new building for Tokuyama Dental Corporation will be constructed to increase the production capacity of composite resins. Sales of dental materials have been growing steadily because of rising demand for OMNICHROMA and resin blocks for CAD/CAM crowns, mainly in Europe and the United States. To respond to this growing demand, we are now boosting production capacity with this new building, which is scheduled to start operations in October 2024. When expansion is complete, production capacity is expected to approximately double, establishing a robust production system to meet the strong demand.

Rendering of new building for Tokuyama Dental Corporation

Resin block for CAD/CAM crowns

Message from the CFO

Maximizing corporate value by improving earnings from traditional businesses and aggressively investing in growth businesses based on a sound financial position

Representative Director, Senior Managing Executive Officer
General Manager, Corporate Planning Division
Hideo Sugimura

What I Value as CFO

As CFO, I specifically focus on implementing a dynamic business strategy based on future investment plans while maintaining sound financial discipline. The Corporate Planning Division is responsible for corporate planning as well as accounting/finance. Since I have the responsibility for these two roles—much like the gas pedal and brakes of an automobile—I recognize that balancing them is also essential for risk management. As well, I keep an eye on our ability to generate cash, in this way maintaining a more stable financial foundation while closely watching ROE, an indicator of management efficiency.

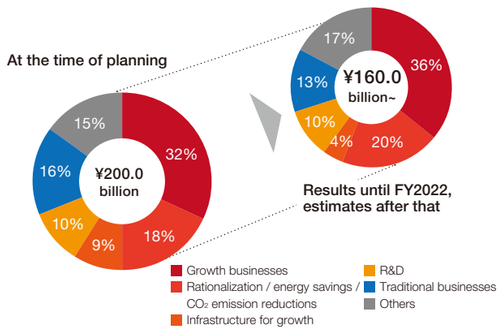
In FY2015, Tokuyama recorded a significant impairment loss related to Tokuyama Malaysia Sdn. Bhd, our former subsidiary that we were worked with in polycrystalline silicon operations in Malaysia. Since that loss was recorded, the Company's financial position has improved through consistent profits. However, as the equity increases in the future, whether or not the Company will be able to generate returns in proportion with this increase will become an important part of our financial strategy. Although it is not possible to predict future business conditions, including trends in the costs of energy and resources, as CFO, I will take the lead in realizing sustainable growth and increasing corporate value.

Review of FY2022 and Outlook for FY2023

We continued to face tough business conditions in FY2022. International concerns over energy and resource shortages following Russia's invasion of Ukraine triggered global inflation, while in Japan the weak yen caused price hikes for imported goods, putting pressure on corporate earnings. Given these conditions, we came together as a group to work on tackling the priorities of Medium-Term Management Plan 2025. As a result, net sales increased year on year due to successfully revising sales prices for chemicals, cement, and semiconductor-related products. However, operating profit and other profit measures fell due to higher raw material and fuel costs, logistics costs, and lower market prices. FY2022 was a year when we learned many lessons, including the apparent weaknesses of the energy-intensive business model.

For FY2023, we expect that the methods we have been focused on—boosting profitability and setting proper pricing—will gradually produce tangible results. Nonetheless, there is a lingering uncertainty over trends in raw material and fuel prices as well as the slow semiconductor market. We expect net sales to increase 8% year on year and the various profit indicators to rise significantly, all exceeding 100% year on year. On the financial front, I want to see the Company continue to manage funds effectively and carefully in preparation for redeeming a subordinated loan of ¥60 billion in September 2023.

Capex Plan Breakdown (FY2021–2025)



Keywords are priority investment in growth fields, reduction of CO_2 emissions, and energy savings

Major Capex Results

- Construction of the factory of joint venture company in Taiwan for high-purity IPA
- Construction of the factory of joint venture company in Korea for high-purity IPA
- Production capacity expansion of dental materials
- Waste gypsum board recycling business Construction of a new plant in Muroran
- Establishment of the Center for Commercialization of Advanced Technology

Financial and Capital Strategy

Since experiencing an impairment loss related to Tokuyama Malaysia Sdn. Bhd., our former subsidiary, we have focused on restoring our financial strength by limiting capital expenditures to within the operating cash flow. As a result, our ability to generate cash as well as avoid taking on interest-bearing debt have both been reinforced, and a solid financial base is supporting our medium- to long-term business strategy. The transformation of our business portfolio and initiatives that are contributing to the mitigation of global warming—set as Medium-Term Management Plan 2025 priorities—will require significant funding. While maintaining the basic policy of making investments using our own funds, we intend to bring about sustainable growth by investing management resources in nurturing growth businesses and in initiatives for creating a carbon-neutral society.

In addition to investing resources in the three growth businesses, electronics, healthcare, and the environment, we will improve the efficiency of traditional businesses and secure stable earnings through an energy transition plan that is focused on carbon neutrality. At the same time, we will invest in DX to support our business model transformation as well as human capital and R&D, the sources of corporate competitiveness. Total capital investment during the period covered by Medium-Term Management Plan 2025 is expected to exceed ¥160 billion.

Basic Policy on Shareholder Returns

Our basic shareholder return policy is to increase retained earnings while providing consistent dividends to shareholders. During the past several years, we have worked hard to gain equity by positioning the cultivation of growth businesses and improving our financial base as priority initiatives. From FY2023, we will consider, once our business strategy achieves results, revising our shareholder return policy, such as improving dividends or raising the dividend payout ratio, the result of an increase in the ratio of consolidated net sales of growth businesses and accelerated global expansion.

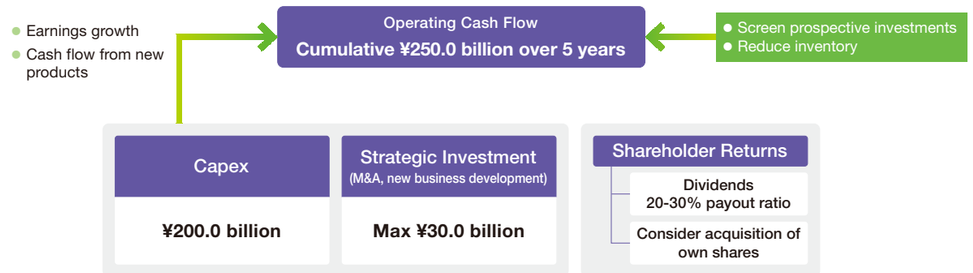
I am aware that having an appropriate share price is also an important issue for improving shareholder value. As of March 2023, the price-to-book ratio has been between the 0.6x and 0.7x level, which is below 1x. However, I do not believe this is an accurate reflection of our business results or potential. We communicate information on the progress and results of our business strategy to capital markets to encourage understanding and a shared among investors.

A Few Words for Our Stakeholders

One of Tokuyama's strengths is a well-balanced business portfolio that does not rely on a specific market. We will continue to develop growth businesses through investments that fully consider financial soundness, while increasing the earnings of traditional businesses through efficient business operations. This basic policy will never change. The subordinated loan redemption will broaden our financial options and allow the Company to further increase investment in growth businesses with the goal of boosting our top line. To further develop our unique value creation process, I would like to see the Company formulate and execute an effective financial strategy for total optimization.

Tokuyama has achieved steady growth with support from many stakeholders, including shareholders, investors, customers, business partners, and local communities. We will continue to communicate information at shareholders' meetings and investor relations briefings to deepen our dialogue with stakeholders. I sincerely ask for your continued support.

Cash Flow Generation and Allocation (when Medium-Term Management Plan 2025 was formulated)



Progress of Strategy by Business Segment:

Electronic & Advanced Materials

Growth businesses

*On April 1, 2023, the name was changed to Electronic & Advanced Materials

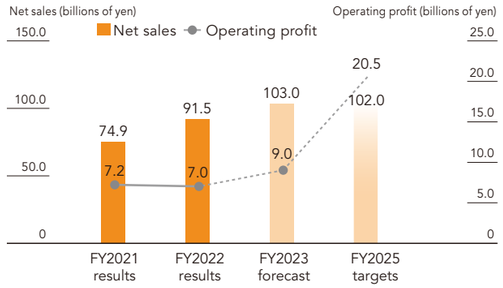
Business Goal

Push forward with globalization and capture the top market share in the high-purity and thermal management materials fields supporting the miniaturization and stacking of semiconductors

Priority Measures

- Pursue aggressive expansion in overseas markets
- Develop new applications, expand product portfolio
- Produce high-quality products, pursue microanalysis technology

Quantitative Targets



SWOT Analysis

S Strengths

- Superior quality in semiconductor-related products
- Differentiation through such proprietary technologies as reductive nitridation method (thermal management materials) and direct hydration (IPA)
- High market share in aluminum nitride powder

W Weaknesses

- Lack of marketing strengths for global expansion

O Opportunities

- Promotion of 5G and IoT, increased demand for data centers
- Growth in semiconductors due to increased functionality of electronic devices, larger memory capacity, and electrification of vehicles
- Increased level of quality requirements from users associated with advancements in miniaturization and stacking

T Threats

- Entry of emerging manufacturers
- Technological innovation in semiconductor market

Progress by Product Area

Product Area	FY2022 Results	Future Plans and Investments
Silicon	• Improve on quality control for semiconductor-grade polycrystalline silicon	• Enhance capacity for high-purity chlorosilanes and expand in Asia • Consider JV for polycrystalline silicon business in Malaysia
IC Chemicals	• Develop Taiwan JV supply structure for high-purity IPA for the electronics industry Establish JV in South Korea as a subsidiary for manufacturing and sales of this product	• Launch JV plant in South Korea for high-purity IPA for the electronics industry
Silica	• Investment enhancement of hydrophobic silica • FDA certification of silica, grades for food additives.	• Expand CASE* and personal care applications • Enter organic silicone field
Thermal Management Materials	• Invest in facilities to study mass production of aluminum nitride filler at the Center for Commercialization of Advanced Technology	• Launch silicon nitride products • Expand sales of boron nitride • Develop new applications and enter downstream fields

*Coatings, adhesives, sealants, elastomers

Message from the Executive Officer in Charge

Responding with Technological Innovation to the Semiconductor and Mobility Industries Improving Our Market Presence

Executive Officer
General Manager, Electronic & Advanced Materials Business Headquarters and Advanced Materials Business Division
Katsumi Nagase

FY2022 Summary (results and issues)

The Electronic & Advanced Materials Business Headquarters was reorganized into two divisions: the Electronic Materials Business Division and the Advanced Materials Business Division, as of April 2023. In the Advanced Materials Business Division, we manufacture and sell fumed silica used for the semiconductor polishing (CMP*) slurries and silicone rubbers, thermal management materials such as boron nitride and aluminum nitride, for some of which the Company has the world's top market share. We received U.S. Food and Drug Administration (FDA) certification for silica and began customer evaluations for entry into the food and personal care markets. This will result in expansion applications, which is the priority measures in the Medium-Term Management Plan. Responding to expansion of the market in China for adhesives for wind-power generator blades and paint inks in China, Tokuyama Chemicals (Zhejiang) Co., Ltd. will boost capacity for surface-treated hydrophobic silica, with operations set to begin in FY2023. Thermal management materials are supported by robust demand for semiconductor components, but the issues confronting us will be to meet quality requirements for state-of-the-art semiconductors and to increase our presence in the mobility industry as it grows.

*CMP: chemical mechanical polishing

Progress on Medium-Term Management Plan 2025 Priority Measures and Future Business Implementation

In July 2021, we finished construction of a facility at the Center for Commercialization of Advanced Technology to manufacture silicon nitride used in thermal management applications, then in 2022 we finished construction of the mass production examination facility for aluminum nitride filler. By undertaking the commercialization of new thermal management materials in addition to the existing aluminum nitride powder, we plan to provide the market with wide variety of products having excellent heat dissipation and high strength required for EVs, and other power semiconductors products, some of which has function to significantly improve thermal conductivity by blending filler with resin. The manufacturing process that we are currently testing for mass production is made up of a number of component processes. While evaluating each of these processes, we are working every day to develop technologies to ensure the quality, safety, and stable production that will satisfy our customers. Global demand, in China and elsewhere, is more dynamic than we initially expected. We will do our best to commercialize new products early, since we naturally consider quality and building a future supply structure to be issues that we must address.

Honing Our Technology and Adding Value to Remain the Company of Choice Among Semiconductor Industry Leaders

Executive Officer
General Manager, Electronic Business Materials Division
Seiji Teranishi

FY2022 Summary (results and issues)

The Electronic Materials Business Division includes two subsegments: Silicon and IC Chemicals. For the Silicon subsegment, soaring coal prices and other factors have pushed up the cost of electric power, significantly increasing manufacturing costs. This has exposed us to a more difficult business environment than we have ever experienced. However, by carefully explaining our business environment to our customers, we were able to gain their understanding and pass on the cost increases to our product pricing. For IC Chemicals, on the other hand, there has been major growth in demand from the electronics industry for high-purity IPA used in cleaning processes due to more miniaturization and lamination of semiconductor chips. We have therefore built a plant in Taiwan for integrated production starting with raw materials; demand in Taiwan is the strongest worldwide, so we have put a system in place to supply locally manufactured products to our customers there. We have similarly started construction of a new plant in South Korea, where we plan to supply samples to customers from FY2023. Given that these products are all used in state-of-the-art semiconductor plants, the technical challenge we face is how to maintain a high degree of purity throughout all processes before the products are used by our customers.

Another challenge is working out how we can help our customers recognize this value, so that this technical advantage results in earnings as a growth business.

Progress on Medium-Term Management Plan 2025 Priority Measures and Future Business Implementation

The semiconductor market will continue to enjoy solid growth. However, the fact that this is such a growth market means that competition over pricing and quality is intense. We must keep our distance from price competition and pursue quality together with our customers, creating added value so that we can survive in this growing market. Specifically, in order to meet customers' requirements for high quality, we will continue to improve our technologies for consistent production, quality control, and microanalysis, as we continually strive to be preferred by customers who specify us for their purchases. Moreover, as we work to grow sales in the Asian market, currently the most important "battleground," we will also work on deploying into the US and European markets, where growth is anticipated in the future.

Progress of Strategy by Business Segment:

Life Science Growth businesses

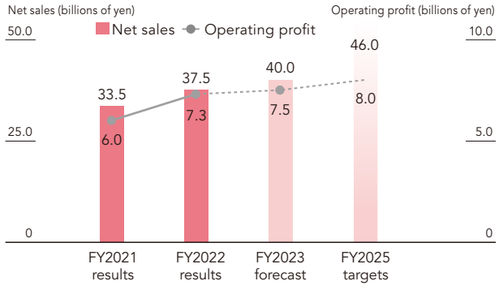
Business Goal

Use unique technology to capture top niche market share in areas where differentiation is possible: vision, dental, and diagnostics

Priority Measures

- Strengthen the marketing system and accelerate expansion of production capability to further boost market share of dental materials outside Japan
- Develop new products and strengthen sales activities to further expand the photochromic market outside Japan
- Strengthen the medical diagnostic systems business

Quantitative Targets



SWOT Analysis

S Strengths

- Unique product and technology development strengths based on chemical technology
- Able to swiftly respond to specific user requirements through close coordination among sales, manufacturing, and development

W Weaknesses

- Lack of marketing strengths and weak sales system in overseas markets

O Opportunities

- Growth of healthcare due to advent of super aging society and heightened health awareness
- Expansion of emerging markets in the Middle East, Asia, and South America

T Threats

- Rise of emerging manufacturers centered on South Korea and China
- Destabilization of supply chain such as procuring raw materials, outsourcing production overseas, and exporting product due to global instability

Progress by Product Area

Product Area	FY2022 Results	Future Plans and Investments
Fine Chemicals	• Generic drug sales remained firm due to our strong reputation for quality control • Global market share increased steadily due to strong performance of photochromic materials for eyewear lenses	• Develop high-rarity APIs and strengthen competitiveness • Develop new photochromic materials and enhance sales activities
Dental Materials and Equipment	• Tokuyama Dental Corporation began commercial operations of new production line at the Kashima Factory • Composite resin business expanded worldwide due to increased shipments to overseas markets and increased sales to Europe, the US, and emerging countries • Sales of blocks for dental crowns increased	• Further grow overseas market share by reinforcing sales structure and accelerating improvements to the supply system
Medical Diagnosis Systems	• Increased orders resulted in only slightly increased sales due to parts and materials shortages • Electrolytes for the Chinese market increased	• Expand major product sales and earnings, while strengthening development of diagnostic reagents

Message from the Executive Officer in Charge

Promoting DX, Strengthening Overseas Sales Networks, Growing Earnings by Continually Introducing New Products

Executive Officer
General Manager, Life Science Business Division
Naoki Tamura

FY2022 Summary (results and issues)

Japan's declining birthrate and aging population are irreversible trends. In order to compensate for the employee shortage that will result from the decrease in population, we have begun a DX project at the Kashima Factory to ensure continued growth by increasing production through plant automation.

In the dental materials and equipment subsegment, we began commercial operations at the new expanded facility at the Tokuyama Dental Corporation Kashima Factory, where construction was completed in 2021, enabling us to make more shipments to overseas customers. We have also been able to steadily accelerate global sales of OMNICHROMA™ and other composite resins in Europe, the US, and emerging countries. Although there was a delay in placing on the market resin blocks for anterior teeth, these are now in full production.

Profit rose in the fine chemicals subsegment due to strong sales of APIs and intermediates for generic drugs. Partly due to inventory buildup by generic drugmakers, orders remained strong with favorable evaluations of our quality control. There was a year-on-year decline in sales of photochromic materials for eyeglass lenses in this sector, partly due to inventory adjustments. Nonetheless, the growth of our worldwide market share for photochromic lenses has grown steadily along with the development of next-generation products.

For medical diagnosis systems, a shortage of parts and materials was among the factors that forced us to delay some deliveries, but the subsidiary that A&T Corporation established in China is now in full operation, helping to grow our sales to China. Rising raw material and fuel prices, as well as a lockdown at the Shanghai plant, made it a tough year for the microporous films used in the backing sheets of disposable diapers and other items, but we continued taking action, including developing environmentally friendly products.

Progress on Medium-Term Management Plan 2025 Priority Measures and Future Business Implementation

We will continue to develop DX systems for extended production, reinforce our overseas network, and introduce new products and services in order to continue transforming our business portfolio.

In the and equipment business subsegment, Tokuyama Dental Corporation has decided to follow up on the production expansion begun in 2021 by constructing a new facility on the Kashima Factory aiming for completion in October 2024. When reorganizing our European sales network, Tokuyama Dental Corporation plans to make the joint venture Tokuyama Dental Deutschland GmbH into a wholly owned subsidiary, in this way increasing the number of expatriate employees in Europe. The sales plan is geared toward more growth for our market share by resuming presentations at exhibitions and more effective advertising as the impact of the COVID-19 pandemic subsides.

For eyeglass lens photochromic materials, we will continue to focus on developing new products in response to customer requirements and changes in the market. For sales in this industry sector, we intend to steadily improve shipment volumes, especially to overseas customers. In FY2022, we took on as a subsidiary ASM Inc., a materials venture company with origins at the University of Tokyo, aiming to create new products in the materials field.

In the medical diagnosis systems business subsegment, we are working to boost major product sales at A&T Corporation and, as we aim to increase earnings, we will capitalize on our Tsukuba Second Research Laboratory to focus on developing medical diagnostic reagents.

Market Environment

Map showing the relative sizes of global markets for dental materials and equipment

Circle size: market size Color: growth potential

Europe and the United States make up 70% of the worldwide market for dental materials and equipment, with North America being the largest market. In Brazil and other emerging countries, market growth continues in line with increasing per capita GDP, while the global market is expected to grow at a CAGR of approximately 6%* until 2030.

Our Group is seizing this opportunity for market growth and aggressively intensifying our sales channels.

*Source: Estimate by Tokuyama based on *Global Medical Device Market* (May 2017), Japan External Trade Organization (JETRO)

Progress of Strategy by Business Segment:

Eco Business

Growth businesses

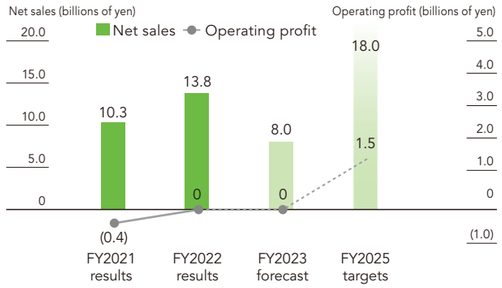
Business Goal

Serve as a new business pillar for the future

Priority Measures

- Respond to expanded demand for water treatment membranes due to strengthened environmental regulations
- Expand resource recycling business in waste gypsum board, photovoltaic panels and others
- Commercialize developed next-generation energy technologies

Quantitative Targets



SWOT Analysis

S Strengths

- Unique technologies such as continuous large recrystallization technology for gypsum
- Ion-exchange membrane water treatment
- Unique technologies, such as PV panel recycling using thermal decomposition treatments

W Weaknesses

- Weak synergies among businesses
- Decreased competitiveness due to rising energy costs

O Opportunities

- Increased wastewater treatment demand due to tougher environmental regulations in China and emerging countries
- Growing global environmental consciousness
- Global awareness for creating a recycling-oriented society

T Threats

- Rise of emerging manufacturers centered in China
- Appearance and practical implementation of alternative technologies

Progress by Product Area

Product Area	FY2022 Results	Future Plans and Investments
Environment	• Waste gypsum board recycling: Construction began on the third domestic site in Muroran City, Hokkaido • PV (photovoltaic) panel recycling: Improved recycling quality and completed process automation	• Waste gypsum board recycling: Ensure stable operation at three factories in Japan and secure earnings and profits • PV panel recycling: Conduct demonstration testing for continuous operation to establish mass production technology and business model
Ion-Exchange Membranes	• Completed large plant for Asian market	• Explore environment-related demand, such as the recovery of valuable resource and decarbonization

Message from the Managing Executive Officer in Charge

Increased Environmental Awareness as an Opportunity to Commercialize Distinctive Technologies

Director, Managing Executive Officer
General Manager, Eco Business Division
Tomohiro Inoue

FY2022 Summary (results and issues)

Both revenue and profit in this division increased in FY2022 compared with FY2021.

ASTOM Corporation achieved major improvements in both revenue and profit by meeting new large-volume demand from the use of specialized membranes with distinctive characteristics to recover a valuable resource lithium (Li). There were also firm demand for ion-exchange membranes used in the production of salt, foods, and potable water. Since strong demand is expected in the future for these applications, both in Japan and overseas, as well as strong demand for continual technology improvements, we will not miss out on the opportunity to develop this technology even further as well as starting work on improving and refining our supply system.

Tokuyama Chiyoda Gypsum Co., Ltd., a company with technology for completely recycling waste gypsum board into the raw material for gypsum board, achieved major growth in revenue since a plant was operating near maximum capacity. The decision was made to capitalize on these circumstances, the untapped area of gypsum board recovery, by moving ahead with a third plant in Muroran City, Hokkaido, Japan, where operations are scheduled to open in the fall of 2023. However, the achievement of this company did not meet earnings targets, due to higher processing costs resulting from an unprecedented surge in resource prices triggered by Russia's invasion of Ukraine. While this company is facing a harsh business climate, we will secure earnings and stable operations at our three locations as we go ahead with several initiatives, including revising our prices.

Plastic window sash manufacturer Excel Shanon Corporation has announced the rollout of Shannon Wind NS50, a new product that vastly improves on existing performance, excelling at operability and design. Given the extremely high evaluations received from customers for this product, the investment ratio of our partner, Panasonic Corporation, was changed in July 2023 to boost product development and sales of the NS50.

Since FY2019, solar panel recycling technology has been developed in the town of Nanporo (Sorachi District) in Hokkaido in collaboration with NEDO,* and a treatment process was established in FY2022. Our public announcement of these results met with strong interest and high expectations both from Japan and overseas. In FY2023, we will carry out a continuous operation demonstration test as we work on establishing this technology for mass production, as well as a business model.

*NEDO: New Energy and Industrial Technology Development Organization

Progress on Medium-Term Management Plan 2025 Priority Measures and Future Business Implementation

As we look at the five-year period of our Medium-Term Management Plan, although we see some progress in each of our business subsegments, it is evident that we have not yet been able to meet internal and external expectations in Tokuyama's three growth business domains: electronics, healthcare, and the environment. Although every one of our businesses has technical and business challenges that must be overcome, we see the value of each business subsegment increasing in the future amid continued strong market growth and the high value and expectations that our customers continue to place on our technology. We will grasp this opportunity, refine our technologies, help form a sustainable society through the commercialization of environmentally friendly technologies, and pursue our goal of establishing new businesses for the future in FY2025, the final year of our Medium-Term Management Plan.

Market Environment

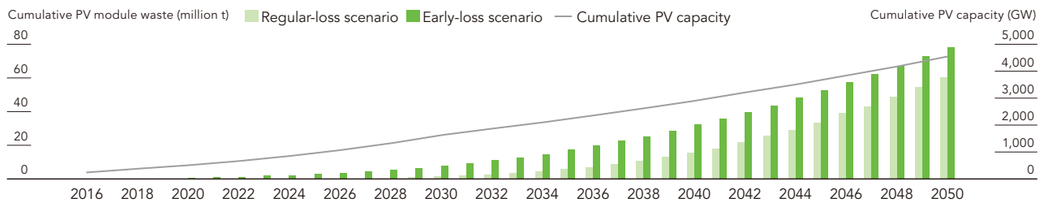
Anticipated Volume for PV[1] Panel Waste Disposal

In Japan, the start of the FIT system[2] propelled the accelerated adoption of solar power generation, while renewable energy policies are driving this expansion in other countries around the world. At the same time, massive quantities of used panels are also expected to emerge, amounting to a forecast global disposal volume of at least 1.7 million tonnes by 2030, rising to 60 million tonnes by 2050.

In order to build up a circular system for solar power generation, it will be necessary to prepare for the coming era of mass disposal by establishing PV panel recycling technology that is sustainable

1 PV: photovoltaic panels for converting sunlight into electricity
2 FIT system: A feed-in tariff for renewable energy

Cumulative global PV module waste disposal (estimated)



*Source: *Status of PV Module Recycling in Selected IEA PVPS Task12 Countries 2022*

Progress of Strategy by Business Segment:

Chemicals Traditional businesses

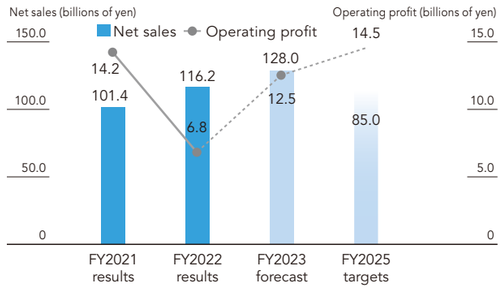
Business Goal

Ensure stable earnings in the existing business

Priority Measures

- Strengthening the Chloro-alkali and PVC chain to maximize profits
- Reduction of CO_2 emissions and waste through the development and introduction of world-class energy-efficient electrolyzers and manufacturing process improvements
- Improve manufacturing processes and supply chains through promoting DX

Quantitative Targets



SWOT Analysis

S Strengths

- Only domestic manufacturer of soda ash
- Electrolyzer unit, electrolysis and manufacturing technology with extensive operating record

W Weaknesses

- Weak sales network overseas
- Sales volume of calcium chloride for antifreeze fluctuates depending on weather conditions
- Coal-based private power generation

O Opportunities

- Spread of fuel cell vehicles and promotion of hydrogen society
- Increase in demand for caustic soda and PVC resin due to economic growth in Southeast Asia and India

T Threats

- Decreasing domestic demand due to Japanese economic recession, customers relocating overseas, etc.
- Easing supply and demand balance due to to higher production at competitors using expanded electrolysis and vinyl chloride production plants
- Impact of continued high raw material prices associated with the Russian invasion of Ukraine

Progress by Product Area

Product Area	FY2022 Results	Future Plans and Investments
Soda Ash and Calcium Chloride	• Maintained competitiveness by establishing a stable supply system	• Maintain and update facilities needed for stable business continuity • Advance energy savings and rationalization to address environmental issues
Chlor-Alkali and Vinyl Chloride	• Strengthen Group partnerships, with Shin Dai-Ichi Vinyl Corporation as a wholly owned subsidiary	

Message from the Managing Executive Officer in Charge

A Stronger PVC Business with Shin Dai-Ichi Vinyl Corporation as a Wholly Owned Subsidiary Focusing on Keeping Product Supply and Quality Stable

Managing Executive Officer
General Manager,
Chemicals Business Division
Hirotaka Nishihara

FY2022 Summary (results and issues)

Fiscal 2022 was a tough year for our chemicals segment, with soaring coal prices due to Russia's invasion of Ukraine and economic stagnation resulting from China's zero-COVID policy. We asked our customers to allow price adjustments in response to sharp increases in the prices of raw materials and fuel as well as logistics costs, then having gained their understanding we have been working to ensure a stable supply. Although the business environment is expected to remain uncertain in FY2023, I intend to engage in dialogues with our customers to work through the issues. Since we are the only manufacturer in Japan of soda ash and calcium chloride, it is particularly important for us to maintain the supply and quality. We will continue to work hard to provide a continuous supply. Also, to reach our goal of a 30% reduction in GHG emissions by FY2030, we are currently studying ways to innovate for more environmentally sustainable manufacturing processes in the Chemicals Business Division. In FY2023, we launched the SCM Visualization Project as part of our promotion of DX in the Chemicals Business Division. Through this project, we will thoroughly review all existing operations and redesign tasks that are overly dependent on personal skills, which I hope will lead to greater efficiency.

Also in FY2023, we will strive to provide a consistent supply to our customers by placing the highest priority on safety and stable operations. In addition, I prefer to think of the trend toward carbon neutrality as a business opportunity and to make this a year when the entire Chemicals Business Division builds environmentally friendly manufacturing processes.

Progress on Medium-Term Management Plan 2025 Priority Measures and Future Business Implementation

With the cooperation of Sumitomo Chemical Co., Ltd., we made Shin Dai-Ichi Vinyl Corporation into a wholly owned subsidiary as of April 1, 2023. We reached this decision because vinyl chloride is one of the most important items in our chlor-alkali and vinyl chloride sector, and changing our approach in this way enables us to accelerate our decision-making. Although making vinyl chloride paste will be outsourced to Sumitomo Chemical's Ehime Plant beginning in FY2023, the supply to customers will continue as before with no change. The customers of our paste business are primarily domestic manufacturers of wallpaper and flooring materials, as well as automotive-related processing manufacturers. We will maintain the system that allows us to always manufacture products sought by our customers and we will continue to sell the products that our customers prefer.

Topics — Contribute to Mitigation of Global Warming

Japan's first domestic joint feasibility study of the social implementation of circular carbon methanol utilizing CO_2

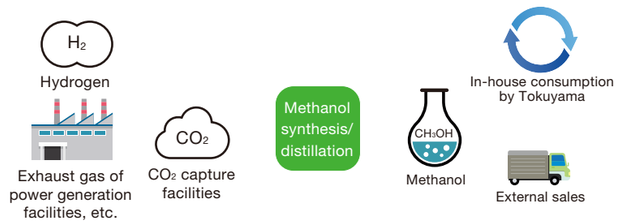
In July 2023, Tokuyama began a feasibility study with Mitsubishi Gas Chemical Company, Inc. for the production and sale of methanol using as raw materials the CO_2 emitted from the Tokuyama Factory and hydrogen (H_2) generated from caustic soda production, by applying Mitsubishi Gas Chemical's proprietary methanol production technology. Through this study, we are also looking at using the green electricity produced when biomass fuels are fed into in-house power generation facilities to produce hydrogen, which can then be used as a methanol feedstock.

Methanol is a base material for various chemical products, and as it can be produced from CO_2, a greenhouse gas, it is expected to be a powerful resource for building a carbon neutral society through carbon capture and utilization (CCU*).

The methanol produced through this initiative deserves the description environmentally circular. The commercialization of the results of this study will lead to the establishment of Japan's first commercial plant to recycle CO_2 emitted from factories to produce methanol. At Tokuyama, our concept is to achieve the "greening" of chemicals through this circular carbon methanol method utilizing CO_2 as a chemical raw material. We are also considering using the existing methanol supply network of Mitsubishi Gas Chemical to serve customers who require environmentally circular chemicals.

Our aims in conducting this study are to help create a market for green products made in Japan and the social implementation of a CCU* industry by helping to instantiate low-carbon value and environmentally circular value, in order to promote the spread of environmentally friendly green products.

*CCU: carbon capture and utilization is the process of capturing carbon dioxide (CO_2) to be recycled for further usage



Progress of Strategy by Business Segment:

Cement Traditional businesses

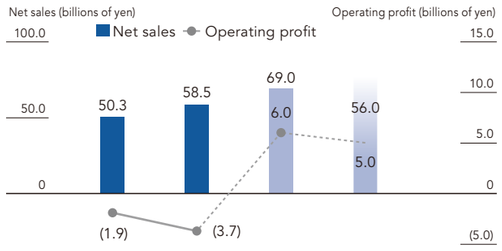
Business Goal

Become the domestic industry leader in energy efficiency

Priority Measures

- Introduce energy-saving equipment to reduce CO_2 emissions
- Reduce the amount of coal usage by accepting more fuel-based waste materials such as waste plastic

Quantitative Targets



SWOT Analysis

S Strengths

- Contribute to environmental preservation by accepting waste from inside and outside the Company for cement feedstock and as a thermal energy alternative
- Enabling technological development from a chemical standpoint based on chemical manufacturing

W Weaknesses

- Higher of repair costs due to aging of facilities

O Opportunities

- Domestic demand due to national resilience and Linear Chuo Shinkansen, Osaka/Kansai Expo and an IR,* etc.
- Demand for building infrastructure associated with economic development in emerging countries

*IR: integrated resort

T Threats

- Decrease in domestic cement demand due to decline in population
- Rising material and logistics costs
- Criticism of cement industry due to problems with CO_2 emissions

Progress by Product Area

Product Area	FY2022 Results	Future Plans and Investments
Cement	• Raising selling prices • Cutting manufacturing costs by using low-grade coal and increased use of waste plastics/tires • Decision on sales subsidiaries merger	• Consideration of suspending operations of a cement kiln • Maintain and update facilities needed for stable business continuity • Advance energy saving and rationalization to address environmental issues • Expand waste treatment that contributes to a closed-loop society
Recycling	• More collection of waste plastics, etc. • Start of a concrete dome silo operation for the consistent supply of raw materials for cement	

Message from the Managing Executive Officer in Charge

Initiatives to reduce costs and increase selling prices

Managing Executive Officer
General Manager,
Cement Business Division
Takahide Taniguchi

FY2022 Summary (results and issues)

Our cement segment faced a tough environment due to soaring coal prices, even higher than the levels they have been at since 2021, caused by Russia's invasion of Ukraine. We worked enthusiastically on both cost cutting and raising our selling prices, our most urgent challenges. From early 2022, in order to improve profitability, we used more waste plastics as an alternative fuel as well as low calorific value coals, which are difficult to handle, while starting to increase selling prices. Although our efforts have achieved limited results, operating profit fell for the second quarter in a row because of significant cost increases.

We invested in loading facilities for soil stabilizing cement at the Osaka cement terminal, readying our system to meet growing demand in the Kansai region for projects such as EXPO 2025 Kansai, Osaka, Japan and an integrated resort project. As well, we merged four sales subsidiaries. These measures strengthened our sales network and management efficiency.

Progress on Medium-Term Management Plan 2025 Priority Measures and Future Business Implementation

As priority measures for our business target of being the domestic industry leader in energy efficiency, we will focus on introducing equipment that is energy efficient and that reduces CO_2 emissions as we cut coal consumption by using more alternative fuels, such as waste plastic.

For our specific initiatives to achieve our targets, in FY2023 we will install high-efficiency clinker cooler bag-filters (converted from electrostatic precipitators) and tanks for new waste liquids. In addition, we have been boosting the use of waste plastics and tire-derived fuel.

Further, we invested in a concrete dome silo in FY2022 to consistently secure alternative raw materials for cement.Because the domestic demand for cement remains on a gradual downtrend, to optimize production and match up our systems with the external environment, we are considering into suspending the operation of one cement kiln.

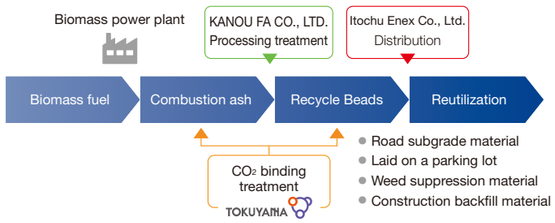
Topics Contribute to Mitigation of Global Warming

Joint research toward effective utilization of biomass combustion ash and realization of CCS[1]

Disposal of fly ash emitted from biomass power plants, which have been increasing in recent years amid the trend toward eliminating fossil fuels, has become an issue because this ash contains elements such as potassium that restrict its reuse in cement. We have been working since 2020 to develop technology for the effective use of fly ash, including CO_2 fixation. This technology will be applied to a construction material sold by Itochu Enex Co., Ltd. affiliate Kano FA Co., Ltd. (trademark: Recycle Beads™[2]) to develop a new CO_2-fixing admixture that enables biomass-derived fly ash to be used effectively and for CCS to be more widely used. By using fly ash that has been made to absorb CO_2 with our technology as a raw material for Recycle Beads™, and by effecting further CO_2 absorption during the production of Recycle Beads,™ we utilize them as CO_2-fixing Recycle Beads™.

Initial studies performed by both companies have shown that CO_2 can be adsorbed into the calcium oxide contained in fly ash and Recycle Beads™ to fix a greater amount of CO_2 than is emitted during the production of Recycle Beads™. We will continue research for enabling the adsorption and fixation of more CO_2 at a lower cost as we move toward the goal of developing construction materials that adsorb more than 10% of the total amount of CO_2 in our products.

1 CCS (carbon dioxide capture and storage)
2 Recycle Beads is a roadbed material and weed control product produced by KANOU FA Co., Ltd., a company in which ITOCHU ENEX Co., Ltd. has a 49% stake.



Message from the Executive Officer in Charge of Sustainability

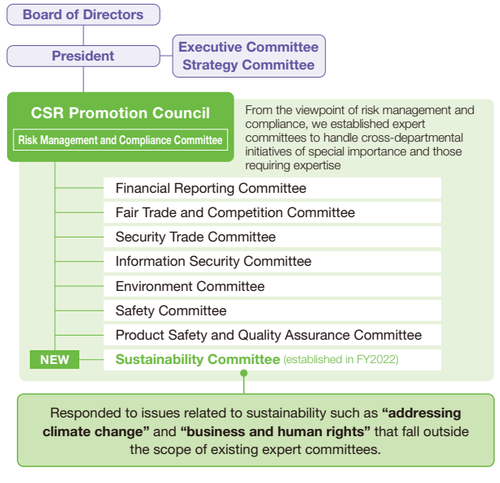
Executive Officer
General Manager of the Corporate
Social Responsibility Division
Michiko Seki

Tokuyama's Views and System on Sustainability

Guided by our Mission—"to create a bright future in harmony with the environment, in collaboration with its customers, based on chemistry,"—we will improve our corporate value to continue to be a company needed by society and that takes action to help create a sustainable society.

In Tokuyama's promotion system for CSR management, the CSR Promotion Council, chaired by the President and including all Executive Officers, encourages corporate governance and makes decisions on important items related to sustainability. In addition, Tokuyama's Risk Management and Compliance Committee, chaired by the director supervising the Corporate Social Responsibility Division, has been established under the CSR Promotion Council to handle risk management and compliance, seen as the core and the "two wheels" of internal control. At the same time, expert committees were spun off from the Risk Management and Compliance Committee to respond to issues in highly specialized and important fields. In FY2022, the Sustainability Committee was established as the eighth expert committee, responding to sustainability issues not covered by other expert committees in order to strengthen our governance. In FY2022, this committee had four meetings to mainly discuss initiatives to be taken for climate change, soft law responses related to external disclosure, and responding to human rights issues, including those in the supply chains.

Promotion System for CSR Management



Connecting to Tokuyama's Vision and Sustainability Initiatives

Promoting CSR management is one of the high-profile issues in Medium-Term Management Plan 2025. First, we must clearly state our fundamental approach and views on sustainability, so we recently established the Tokuyama Group Sustainability Principles showing what our company is supposed to be based on Tokuyama's vision. By inculcating these principles into officers and employees' behavior, we revised the Tokuyama Group Code of Conduct. As it has been more than 10 years since the Code of Conduct was last revised, we updated the code to address value creation, diversified working styles, climate change mitigation, reflecting a recent trend for ESG (environmental, social, and governance) as well as requests from society. Detailed descriptions of action guidelines are included for the related principles and policies, which have also been organized and systematized.

For more information, please refer to the List of Policies on Tokuyama's website.
https://www.tokuyama.co.jp/eng/csr/policies.html

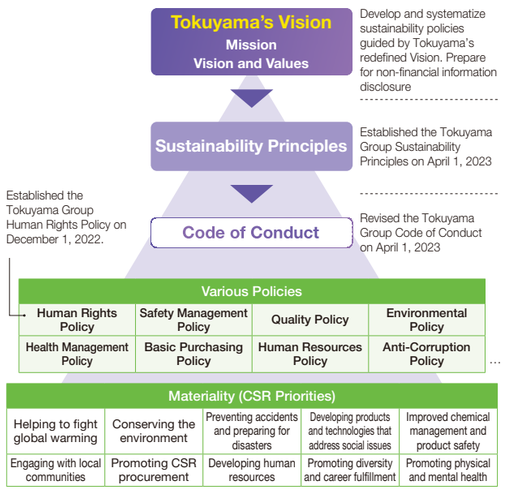
For example, for one new policy that addresses respect for human rights,we established the Tokuyama Group Human Rights Policy, which was influenced by the UN Guiding Principles on Business and Human Rights.

To distribute information on these policies, Group company CSR caravans encourage Group-wide understanding and sharing, under the theme of "promoting sustainability centered on Group management." We also began e-learning programs to raise awareness of the Tokuyama Group Human Rights Policy.

In addition, KPIs for Materiality (key CSR issues), which are the foundation for growth, are determined and monitored by the CSR Promotion Council in order to strengthen our initiatives. From FY2023, we will clarify the responsibilities of all executive officers for addressing materiality, and reflect the progress made in their remuneration for the following fiscal year.

pp. 36–39 | Vision and Materiality

Developing and Systematizing Sustainability Policies



Progress of Sustainability Initiatives in FY2022

To make a "contribution to the mitigation of global warming," one of the priority issues in Medium-Term Management Plan 2025, we set the goal of reducing our GHG emissions by 30% by FY2030 (compared with FY2019). Further, we have declared our intention to achieve carbon neutrality by FY2050. We have put in a TCFD report on Tokuyama's company-wide and sweeping initiatives for becoming carbon neutral. This report is designed to disclose detailed information on 11 items, based on the TCFD Recommendations, with the goal of gaining the understanding of stakeholders and conveying our desire to meet the expectations of society.

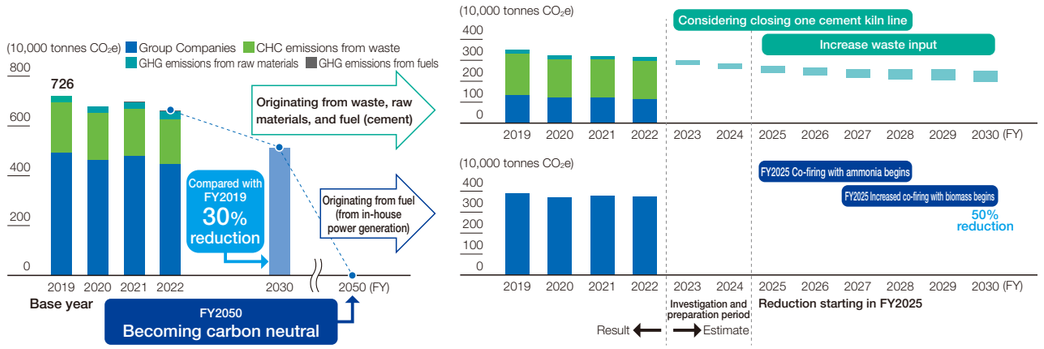
For more information, please refer to Disclosures Based on TCFD Recommendations on Tokuyama's website.
https://www.tokuyama.co.jp/eng/csr/tcfd_information.html

pp. 40–42 | Disclosures Based on TCFD Recommendations

Until now, Tokuyama's strengths have been in a recycling-oriented and highly efficient production system, which is lean and highly integrated, enabling us to produce power from coal-fired in-house power generation as well as to use waste products as raw material for cement production. This is a sustainable approach from the perspective of generating no waste; however, considering the response to climate change, it has become necessary to overhaul our business portfolio. We need to tackle issues such as how to optimize the production system, shift to a portfolio with more growing businesses, and reduce the total output of in-house power generation.

To meet the goal of reducing our GHG emissions by 30% by FY2030 (compared with FY2019), we took two major GHG emission sources and promoted a reduction plan for each of them: one source is GHG emissions from fuels for in-house power generation and the other is emissions from cement production, which includes raw materials, fuels, and waste that is burned. For fuels used for in-house power generation, we have been conducting experiments on the mixed combustion of non-fossil fuels, such as biomass and ammonia. Based on this result,we are going to invest in the technology for mixed combustion. On the other hand, to reduce GHG emissions from making cement—since we plan to increase using combustible waste, including waste plastics—we will work on boosting production efficiency and reducing our overall GHG emissions.

GHG Emissions Reduction Targets



What Needs to Be Addressed from Now

We are working to practice management that enables a PDCA cycle for each of the CSR priorities, with the aim of visualizing a path to resolving issues. For promoting CSR management, I think the following three approaches are common for tackling any issue: (1) to firmly establish short-, medium- and long-term objectives (Vision), (2) to move forward while getting stakeholders widely involved, and (3) to disclose information externally and leverage feedback from stakeholders for the next step. In particular, the external disclosure of non-financial information will be essential for accountability in business activities and the transparency of our governance. These disclosures must be made on a consolidated basis, which requires that the entire Group make concerted efforts for sustainability.

For Tokuyama "to create a bright future" and be sustainable, we will disclose timely information externally that is used for determining corporate value, including the ESG that is now required of a company, respond to stakeholders' trust, and contribute to more improvement of our corporate value.

Vision and Materiality

Achieving Our Vision through Socially Responsible (CSR) Management

CSR management is essential for realizing Tokuyama's Mission, as redefined in 2021, "to create a bright future in harmony with the environment, in collaboration with its customers, based on chemistry." For example, for creating products and services that contribute to a "bright future," we must first correctly understand the expectations and requirements of society, and then for every person in the Group to have a "vision" of what needs to be done and to work every day from a long-term perspective and have an awareness of potential social issues. This attitude and this behavior are also important for us as we move from the traditional business model and transform ourselves into a value creating company. In other words, Tokuyama's CSR management covers the creation of new value for a sustainable society and it should be promoted by the concerted effort of all managers and all employees.

The Tokuyama Vision has been developed so that we can clearly visualize our future image in order to realize our Mission. Materialities (material issues) refer to CSR priority issues identified by CSR management that are used when making up an action plan for realizing our Vision.

We work on our initiatives to realize our Vision, while connecting with the objectives of the divisions and departments for their goals for materiality as well as KPIs. Every year, the Corporate Social Responsibility Division summarizes the implementation of their initiatives, which is then reported to the CSR Promotion Council, chaired by the President, and with all executive officers. In addition, for calculating executive remuneration for executive officers, we incorporate items for addressing materiality as criteria and evaluate executives according to the degree of contribution, taking into account our calculation of the executives' specific roles and responsibilities. We are working hard to continually raise the level of CSR management by following the company-wide PDCA cycle that we use to check on progress and analyze current conditions.

The Sustainability Committee, established in FY2022, has begun to promote CSR procurement and information disclosure based on the TCFD recommendations. We have also established, after obtaining approval from the Board of Directors, the Tokuyama Group Human Rights Policy, which is central to initiatives related to human rights.

Tokuyama's Materiality

Material issues are used as guidelines to devise action plans for realizing Tokuyama's Vision. The table below shows the aspirations and KPIs for each material issue as well as results and the people and departments who are responsible. Our actions for addressing materialities also contribute to the realization of the UN's SDGs. For reference, our material issues and their main SDGs are shown in the table below.

Process of Identifying Materiality

In 2019, the Company identified nine material issues based on important social factors, dialogues with stakeholders, and third-party opinions from external experts. In 2021, after reviewing these issues, in line with the new Medium-Term Management Plan 2025, we increased the number of materialities (material issues) to ten, then formulated targets and KPIs for FY2025.

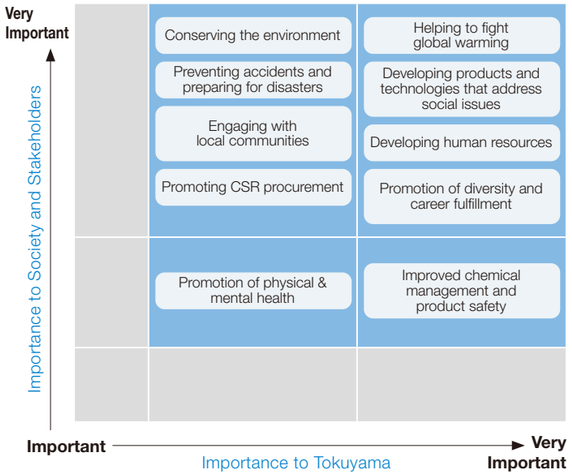
We are determined to always take action for building a sustainable future with society, to contribute to resolving social issues, increase trust from diverse stakeholders, as we aim to improve corporate value. Tokuyama will solidify relationships of trust with society by strengthening initiatives for dealing with material issues, while pursuing our own unique approach to CSR management.

STEP 1 — Extract and organize issues
Extract and organize social issues from the social requirements and Tokuyama's business activities

STEP 2 — Order of priority
Decide on the priority based on importance to stakeholders and Tokuyama

STEP 3 — Review by experts
Review priorities and quantifications (metrics) based on feedback from outside experts

STEP 4 — Commitment from management
CSR Promotion Council discusses suitability of material issues and approves them



For detailed information on our activities, please refer to the CSR page section of Tokuyama's website.
https://www.tokuyama.co.jp/eng/csr/

Materiality KPIs and Results

○ 80% or more △ 50% or more × less than 50%

Material Issue Relationship to SDGs	Our Vision	KPI / Target	FY2022 Results	Achievement level	Person responsible* Department responsible
Helping to fight global warming	• Achievement of carbon neutrality by FY2050	• Reduction of GHG emissions of the Tokuyama Group: 30% reduction in FY2030 (compared with FY2019) • Active disclosure of climate-related information	• Promoting coordination with regions, local governments, and within the Industrial Complex, aiming for carbon neutrality • Considered introducing alternative fuels, such as biomass • Acquired third-party certification for GHG emissions (Scopes 1, 2, and 3) • Responded to CDP Climate Change Questionnaire (score: B) • Changed the method of calculating GHG emissions to comply with the GHG Protocol • Introduced internal carbon pricing to the screening of prospective investments	○	Director (President and Executive Officer) Carbon Neutral Strategy Div. Responsible Care Management Department Factory Planning and Administration Department
Conserving the environment	• Promoting recycling and maintaining zero landfill waste • Maintaining low emissions of environmental impact substances • Complying with legal requirements and other regulations, achievement of zero environmental accidents • Contribution to biodiversity conservation	• Reduced environmental impact: · Effective utilization rate for waste ≥94% · Zero waste emission rate ≥99.9% · Maintaining low emissions of environmental impact substances • Complying with legal requirements and other regulations, achievement of zero environmental accidents • Contributing to biodiversity conservation	• Effective utilization rate for waste: 94.7% • Zero waste emission rate: 99.9% • Maintained low emissions of environmental impact substances; actions are being taken by every department • Complying with legal requirements and other regulations, and zero environmental accidents • Forest volunteers, cleanup drives, etc. • Responded to designated alien species	○	Director (Chairperson of Environment Committee) Responsible Care Management Department
Preventing accidents and preparing for disasters	• Accident prevention and disaster preparation • Improvements in process safety management level • Fostering and improving the safety culture	• Zero accidents and zero lost time injuries; number of incidents: zero • Deepened risk assessment • Promoting smart security	• Number of serious accidents/disasters: zero · Number of accidents: 2 · Occupational accidents: Employees with no lost time injuries: 4 Contractors with lost time injuries: 2; No lost time injuries: 2 • Identified risks through risk assessment and began mitigation • Promotion of smart security: Considered the use of a detector for unusual items in maintenance work	△	Director (Chairperson of Safety Committee) Responsible for Care Management Department

*Person responsible: Someone who serves as a director and chairperson of the committee/meeting body that he/she is in charge of

○ 80% or more △ 50% or more × less than 50%

Material Issue Relationship to SDGs	Our Vision	KPI / Target	FY2022 Results	Achievement level	Person responsible* Department responsible
Developing products and technologies that address social issues	• Increased development of products and technologies that help to resolve social issues, focusing on SDGs	• Promoting the development of products and technologies that help to resolve social issues, focusing on SDGs [Electronics] Expansion of product line and creation of new business in peripheral materials [Healthcare] Creation of new technologies for product line expansion and globalization [Environment] Creation of new technologies to reduce CO_2 emissions	[Electronics] Accelerated initiatives aimed at commercialization through marketing originating from customers [Healthcare] Decided to commercialize products based on multiple themes [Environment] Promoted Medium-Term Management Plan 2025 strategies and created businesses based on multiple themes	△	Director (in charge of Research & Development) Research & Development Division
Improved chemical management and product safety	• Maintaining effective chemical management and promoting product safety within the Tokuyama Group	• Complying with chemical laws and regulations in each country: Zero infractions of chemical-related regulations and zero accidents due to product safety • Risk management of chemical products, including the whole Group	• 63 product reviews (second and third rounds); 706 labeling reviews • Understood and responded to domestic and overseas regulatory trends · Japan (Chemical Substances Control Act, Industrial Safety and Health Act, and Law for Promotion of Chemical Management) · Overseas (EU Chemicals Strategy for Sustainability, Nano Material Regulations, China's Yangtze River Protection Law, etc.) · Labeling and SDS-related (JIS and others overseas) • Provided education to departments and Group companies involved in chemical product management and conducted regular inspections and interviews on their state of management • Promoted the management system for chemicals contained in products	○	Director (Chairperson of Product Safety and Quality Assurance Committee) Responsible Care Management Department
Engaging with local communities	• Harmoniously co-existing and cooperating with communities: Contributing to a decentralized society through business • Contribution to communities: Providing a place where people can grow and flourish	• Harmoniously co-existing and cooperating with communities: · Dialogue with community · Active participation and cooperation in various community events (for residents, government, and other organizations) • Helping resolve community issues and contributing to the sustainable development of the community: · Hiring from local community · Social contributions · Contributions to the community through business	• Dialogue with community · Conducted a dialogue with the community while taking COVID-19 countermeasures, such as online conversations · Conducted factory tours for local community, local elementary school students, etc. · Sponsored Tokuyama Summer Festival and Shunan Winter Tree Festival • Social contribution · Participated in volunteer activities (cleanup drives, Tokuyama Chemical Club, etc.) · Educational support for neighboring schools (Mikage Bunko book program, work experience for junior high school students, etc.) • Contributions to the community through business · Provided specific power supply to Shunan City (for City Hall, Tokuyama Station Building, etc.)	○	Director (in charge of CSR, and General Affairs and Human Resource) General Affairs Department Environment & Safety Department Factory Planning and Administration Department
Promoting CSR procurement	• Management of supply chains based on CSR procurement guidelines	• Promoting survey and management of supply chains based on CSR procurement guidelines: · More detailed investigations of suppliers by using refined assessment checklists · Establishing a system for on-site audits of suppliers · Reduced environmental impact from logistics	• Revised CSR procurement guidelines (December 2022) • Raised awareness of new CSR procurement guidelines Requested written consent from companies with a transaction value of 30 million yen or more (collected from 215 out of 296 companies) • Began to implement supplier assessments for companies with a transaction value of 100 million yen or more by using the SAQ published by GCNJ (collected from 133 out of 181 companies)	○	Director (Chairperson of Sustainability Committee) Procurement Department Logistics Department
Developing human resources	• Developing and strengthening human resources, the source of corporate competitiveness • Strengthening human resources for the next generation	• Developing management personnel for the next generation • Training highly skilled engineers to support business execution • Begin suitable employee deployment and rotation of personnel based on career planning and job skills • Established human resource development by linking with goal setting and feedback	• Implemented new business leader training (attended by 20 employees with a cumulative total of 37) • Formulated an education plan on DX • Implemented training related to global human resource development: Attended by 33 employees • Launched a new self-development program • Defined ideal images for the desired personnel and skills based on 13 job groups; published company-wide in April 2022 • Created a system for strategic rotation; established HR business partners; Organized human resource information through an HR management system • Conducted four training sessions for evaluators (75 employees) to deepen their understanding of appropriate goal setting	○	Director (in charge of General Affairs and Human Resources) Human Resources Department
Promotion of diversity and career fulfillment	• Acceptance and utilization of diverse human resources • Respect for human rights	• Promotion of diversity and inclusion · Active promotion of women: 20% of new graduates, ≧5% of management positions, ≧10% of executives, etc. · Promotion of employment of persons with disabilities: 2.3% • Promotion of work-life balance: annual paid leave acquisition rate: ≧75%; childcare leave acquisition rate: ≧75% • Number of male employees on childcare leave: ≧10 or ≧75% of male employees • Acquisition rate of women taking childcare leave ≧70%	• Promotion of diversity and inclusion · Continued career hiring incorporating diverse skills and values (38 people in FY2022) · Number of female managers increased by five, reaching 2.7% (non-consolidated) with target raised from 2.0% to 2.5% in FY2022, to 5% in FY2023; Consolidated percentage of women among all managers: 4.7% · Percentage of people with disabilities: Although actions have been taken, the employment rate for this group compared with FY2021 stayed at 2.02% (three people hired in FY2022) · Established an agricultural corporation in December 2021 with the aim of creating employment for people with disabilities, preparing for the start of production in July 2023 · Number of male employees on childcare leave: 22 (average of 32 days) • Respect for human rights · Established and released human rights policy (December 2022)	○	Director (in charge of General Affairs and Human Resources) Human Resources Department
Promotion of better physical & mental health	Cultivation of physical & mental health of employees and their families, and creation of a work-friendly environment • Cultivating better physical and mental health • Promotion of measures to address lifestyle diseases	• Enhanced individuals' awareness of health: smoking rate <15% • Maintaining and lowering percentage of findings · Regular health consultation rate: 100% · Re-examination rate: ≧90% · Specific health guidance rate: ≧80% • Lowering the leave rate: <5% • Stress check examination rate: ≧95% All non-consolidated	• Antismoking drive Smoking rate: 18.9% (FY2021)→17.6% (FY2022) (FY2022 goal of less than 18% achieved) Banned indoor smoking, no smoking campaign • Health guidance and measures after health diagnosis Regular health checkup rate: 100% (FY2021)→100% (FY2022) Re-examination rate: 81.0% (FY2021)→89.2% (FY2022) Specific health guidance rate: 85.3% (FY2021)→84.5% (FY2022) • Mental healthcare Leave rate: 0.66% (FY2021)→0.75% (FY2022) Stress check examination rate: 98.1% (FY2021)→97.5% (FY2022) Implementation of mental health training and e-learning (for workers in management positions and regular workers) • Selected as an enterprise engaging in a health management program and certified as a health and productivity enterprise (White 500) in FY2023 All non-consolidated	○	Director (in charge of General Affairs and Human Resources) Health Care Center

*Person responsible: Somebody who serves as a director and chairperson of the committee/meeting body that he/she is in charge of

Disclosures Based on TCFD Recommendations

The Tokuyama Group supports the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and has conducted repeated investigations into climate change risks and opportunities based on the TCFD recommendations. In FY2022, we further analyzed these risks and opportunities, strengthened our strategy, and clarified our metrics and targets. See Disclosures Based on TCFD Recommendations *(Tokuyama TCFD Report*, or *TCFD Report)* for more details.

Disclosures Based on TCFD Recommendations *(TCFD Report)*
https://www.tokuyama.co.jp/eng/csr/tcfd_information.html

1 Governance

The Tokuyama Group has identified climate change as one of the most significant management risks. Accordingly, helping to mitigate global warming is one of the key objectives under Medium-Term Management Plan 2025.

The new Sustainability Committee was established under the CSR Promotion Council in FY2022 for addressing major risks for sustainability, with a framework created for identifying and assessing cross-organizational risks and opportunities. Items of special importance are discussed by the CSR Promotion Council, and reported to and overseen by the Board of Directors. The Board of Directors verifies the progress of these mitigation initiatives and other key objectives of Medium-Term Management Plan 2025, as well as future investment plans, among other items.

As mitigation initiatives transitioned from the concept stage to the implementation stage from April 2023, Tokuyama is accelerating efforts by establishing the Carbon Neutral Strategy Division, which operates independently. The *TCFD Report* provides more details, including supervision by the Board of Directors and the role of the management team.

pp. 34-35 | Message from Director in charge of sustainability

System to Promote Carbon Neutrality Achievement

2 Strategy

The Group's Medium-Term Management Plan 2025 addresses both the risks related to climate change and the potential new business opportunities in the environmental field. For Tokuyama, risk mitigation includes making visible the carbon costs coming from the introduction of carbon pricing, addressing the impact of potential changes in customer procurement policies, and identifying the impact on financing from potential policy changes at financial and investment companies. Moreover, by focusing on international risk scenarios, we analyzed risks and opportunities using the 1.5°C and 4°C global warming scenarios covering the period from the present to 2050. Our aim is to monetize promising business opportunities while reducing climate change risks by shifting our business portfolio from energy-intensive to value-creating companies. The *TCFD Report* covers the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning, and the resilience of the company's strategy.

Risks Posed by Climate Change (scenario analysis)

Short term: by FY2025, medium term: by FY2030, long term: by FY2050

Scenario	Risk category	Target of risk assessment	Potential impacts on the Group (financial) (identified risks)	Financial impact	Timing of risk materialization	Impact on business	Priority level	Response measures
1.5°C	Government policy and regulations	Carbon pricing and energy procurement costs	• Increase in operating costs due to expanded carbon pricing	Moderate	Medium to long term	Large	Low	• Monitoring carbon pricing policy trends and conversion to non-fossil fuels • Evaluation and implementation of measures based on internal carbon pricing • Participation in the GX League
			• Increase in costs for mitigation initiatives due to tightening the GHG emission regulations	Moderate	Medium to long term	Large	High	
	Technology	Green process adoption measures	• Increased green energy production and procurement costs	Large	Medium term	Large	High	• Construction of large-scale supply chains and advancement of efficient technologies for green energy utilization • Procurement system and process development
			• Increased costs for green material procurement and green process conversion due to lack of technology and market maturity	Large	Medium to long term	Large	High	
	Evaluation	Evaluation by stakeholders	• Decline in market value and increase in financing costs due to a poor evaluation of carbon neutrality initiatives • Risk of litigation by local residents to shut down or decommission coal-fired power plants owned by Tokuyama • Sustainability risks for biomass fuel	Large	Medium to long term	Large	High	• Enhanced disclosure of information and setting GHG emission reduction targets • Transform business portfolio • Ensuring the sustainability of biomass fuel
	Market	Penetration of green procurement by customers	• Rejection of products by the market based on large carbon-footprint evaluation • Decrease in profitability due to the inability to pass on the price fully covers the costs for green process adoption	Large	Medium to long term	Large	High	• Steady reduction in GHG emissions • Creation of green products based on mass balance approach certification • Enhancing supply chain cooperation for green market formation • Construction of a carbon footprint evaluation system
4°C	Physical risks (acute)	More frequent extreme weather events and sea level rise	• Wind and flood damage to production plants; production plan delays and increased costs due to supply chain disruptions, etc.	Moderate	Long term	Moderate	Moderate	• Enhanced BCP measures
	Physical risks (chronic)	Long-term intensification of extreme weather events and rising sea levels	• Decrease in production capacity due to insufficient factory cooling capacity caused by rising average temperatures • Production halts due to storm surges caused by rising sea levels	Minimal	Long term	Minimal	Low	• Setting GHG emission reduction targets

Climate Change Opportunities (scenario analysis)

Short term: by FY2025, medium term: by FY2030, long term: by FY2050

Scenario	Opportunity Type	Opportunity Assessment Target	Impact on Tokuyama Group	Impact Level	Term	Priority Level	Response Measures
1.5°C	Market	Expanding demand in the environmental market	• Expansion of businesses offering waste disposal, effective utilization of resources, and measures to combat global warming	Large	Medium to long term	High	• Commercialization of renewable resources and energy (biomass and hydrogen)
		Shift to carbon neutrality by regions and industrial complexes	• Enhancing site competitiveness by promoting large-scale green supply chains for energy and materials	Large	Medium to long term	High	• Joining the Decarbonization Promotion Council, promoting green supply chain construction, and participating in and promoting the development of green technology
	Resource use efficiency	Requests for CCU-related products	• Entering new business fields by establishing a carbon recycling system	Large	Medium term	Moderate	• Accelerating R&D, demonstration projects, and actual green technology adoption in business operations

3 Risk Management

Climate change risks are positioned as the most significant type of risk as defined by "Responding to global decarbonization" in the Mapping of Significant Enterprise Risks.

Given the accelerating global trend toward decarbonization, under the Group's Medium-Term Management Plan 2025, we have decided that we must shift away from our energy-intensive business structure, which has been our strength up to this point. So, one of the priority issues of Medium-Term Management Plan 2025 is to "Contribute to Mitigation of Global Warming" and we are pursuing group-wide initiatives to achieve this. The *TCFD Report* covers details of the Company's processes for identifying and assessing climate-related risks, processes for managing climate-related risks, and how they are integrated into the company's overall risk management.

pp. 50-51 | Risk Management

4 Metrics and Targets

Fuel-derived GHG emissions account for about 70% of our total GHG emissions, and we are aiming to reduce these by promoting energy-saving measures and switching to carbon-neutral fuels. We will be reducing GHG emissions from raw materials-derived by reducing the amount of limestone used. We will go ahead with the development and introduction of these measures, while evaluating the economic viability. At present, however, it appears that reducing these emissions to zero will be difficult, so CO_2 capture, utilization, and storage (CCUS) could be necessary. The Group will go ahead with the development and introduction of these measures. The *TCFD Report* provides details of climate-related metrics, Scope 1, Scope 2, and, Scope 3 greenhouse gas (GHG) emissions, as well as the targets and performance against the targets.

While the steady reduction of GHG emissions is our responsibility as a company, we also recognize that reducing GHG emissions caused by our products is important. Tokuyama is taking a multi-faceted approach to achieving global decarbonization (see the diagram below; "Initiatives to achieve carbon neutral FY2050"). In FY2022, initiatives for adopting green hydrogen included the development of water electrolyzers, the development of technologies for the effective use of CO_2 included CO_2 capture from cement production, the development of green products included the development of carbon negative concrete, and the reduction in GHG emissions originating from fuels-derived, raw materials-derived, and waste-derived included collaborating with local governments and industrial complexes. See the *TCFD Report* for more details on these initiatives. Looking ahead, we will continue contributing to achieving global carbon neutrality by expanding our lineup of eco-friendly products and further developing innovative technologies.

pp. 34-35 | Message from Director in charge of sustainability

pp. 52-55 | Financial and Nonfinancial Highlights

Initiatives to achieve carbon neutral FY2050

Compliance

Basic Stance and System

For Tokuyama the word *compliance* has a broad meaning, including not only complying with laws and internal rules but also behaving sensibly in a way that conforms with corporate ethics to meet social expectations. To communicate and spread awareness of compliance throughout the Group, the Company has put together a leaflet that includes the Tokuyama Group Code of Conduct. It is distributed to all Group officers and employees. In addition, we also conduct training based on job level for raising awareness and hold meetings with managements and those in charge of compliance at Group companies.

Whistleblowing System

An internal helpline has been established to enable safe, anonymous reporting and consultations on compliance violations involving the Tokuyama Group (including potential violations) without fear of retaliation. Reporting and consultations can be carried out by mail, email, or telephone. The helpline is operated in a way that protects whistleblowers. Employees can use the helpline without disclosing to the Company their name or department, and a female attorney is available for consultations. In FY2022, the Company endeavored to boost the effectiveness of the internal reporting system by setting up the system and to be compatible with Japan's revised Whistleblower Protection Act, while ensuring that employees familiarize themselves with the system, as well as inviting external lecturers to provide training to employees working in the Group's internal reporting system as a way of standardizing and improving their employee support skills. There were no occurrences of serious noncompliance in FY2022.

	FY2018	FY2019	FY2020	FY2021	FY2022
Number of reports	36	29	24	34	29

Note: Includes reports on workplace harassment and reports from Group companies in Japan.

Stakeholder Engagement

Tokuyama emphasizes communication with diverse stakeholders, working in harmony with society to build a sustainable future.

Stakeholders	Main Avenues for Communication
Customers	• ISO 9001 • TV commercials • Factory tours
Global Environment	• Responsible Care • Environmental management • ISO 14001 • Reduction of GHG emissions, energy conservation • Waste disposal • Biodiversity initiatives • Development and provision of environmentally friendly products
Local Communities and Society	• Accident prevention • Responsible Care Community Dialogue program • Community volunteers • Sponsorship of and participation in summer festivals • Grants to promote science and technology • Grants for raising the next generation, and safety and disaster prevention activities
Shareholders and Investors	• Briefing session for individual investors • Briefing session on financial results • Brief statement of accounts • *Annual Securities Report* • General Meeting of Shareholders
Business Partners	• Purchasing management • CSR purchasing • Joint Occupational Health and Safety Conference
Employees	• Workplace patrols • In-house newsletters • Education and training • Health and Safety Committee • Labor-Management Council

Dialogue with External Directors

Aiming to Establish Effective Governance and to Sustainably Improve Corporate Value

Yuzo Kawamori
External Director, Audit & Supervisory Committee Member

Nobuko Mizumoto
External Director, Audit & Supervisory Committee Member

Career Backgrounds and Valued Concepts

Kawamori After joining Kansai Paint Co., Ltd., I spent 17 years in its International Business Unit and 17 years in the Japan Business Unit. Then from 2010, I was in charge of group management as the Representative Director of the Board and President. You could say that my strength lies in my varied experiences and achievements in both domestic and international businesses. My creed in business is *profitability and fairness*. Although a company's fundamental mission is to generate revenue, no company can last without conducting business in a fair way with deep consideration for social values. Ever since I was appointed as External Director of the Company, I have always strived to monitor Tokuyama's management structure and strategies from the perspectives of *profitability and fairness*.

Mizumoto After joining Ishikawajima-Harima Heavy Industries, Ltd. (currently IHI Corporation), I was involved in various types of technical-related work and was later in charge of the digital transformation (DX). Since the time I was appointed as External Director of Tokuyama in June 2021, I have been providing advice on the suitability of the Company's management strategy, mainly from a technical point of view. In recent years, more and more women have been appointed to the board of directors of various companies in line with the concept of diversity. However, I believe that there are no real gender-based differences in corporate management, so I am not really thinking about the fact that I am a woman as I carry out my duties as External Director. I feel that diversity of knowledge is more important than diversity of genders.

Assessment of Corporate Governance

Kawamori I think there are seven important themes surrounding the management of any manufacturer: 1. financial soundness, 2. continuity as a business entity, 3. transparent management, 4. growth (profit generation), 5. compliance, 6. quality improvement, and 7. safety. The agenda items addressed by Tokuyama's Board of Directors always include topics related to these management themes, and lively discussions are held on these topics. In addition, the content of the discussions during the Executive Committee are explained in detail to External Directors through briefings, and executive training sessions are held from time to time where Directors receive reports on business progress from the general managers of each department. I think that effective discussions and information sharing by the Board of Directors are the two things that make governance at Tokuyama superior to governance at other companies.

Mizumoto I also agree with that idea. Each time the Board of Directors meet, Directors have energetic discussions, allowing all of them to frankly express their opinions. This means that the Company has created a corporate culture that values other people. Also, there are four External Directors, including myself, who all have different professional backgrounds. Combining the specialized knowledge of Tokuyama's Directors with the wide-ranging knowledge and insight of the External Directors helps to ensure the effectiveness of our strategies and actions. This is my impression of Tokuyama's corporate governance.

Executing Medium- and Long-Term Strategies: The Roles of External Directors

Kawamori The Company is currently moving ahead with Medium-Term Management Plan 2025, centered on transforming the business portfolio. To realize sustainable growth when market conditions are uncertain, it is essential to accurately grasp the potential needs of customers with a high level of sensitivity and then to build a new business model in line with the changing times. I recognize that, from the perspectives of profitability and fairness, maintaining the support that comes from these initiatives is the mission of the External Directors as well as the Audit and Supervisory Committee Members. Creating a next-generation business portfolio is a common theme for the industry as a whole. At first, successfully reforming Tokuyama's business structure and optimizing global expansion should allow the Company to communicate the type of company we should be in the Japanese and global economic communities.

Mizumoto From the perspectives of *profitability and fairness*, which Mr. Kawamori previously mentioned, we could use different words and say that there are elements that will change as well as elements that will remain unchanged in the Company. Something that will change is the Company's business model; in other words, building a new value creation process by reorganizing business areas and regions of operation. In contrast, I think the elements that will remain unchanged are the Company's Mission, Vision, and Values. I believe that the role and mission of External Directors is to realize Tokuyama's Mission—defined as "To create a bright future in harmony with the environment, in collaboration with its customers, based on chemistry"—in management and business operations that contribute to creating strong foundations.

Achieving Sustainable Growth: Outlook and Issues That the Company Faces

Kawamori For Tokuyama to continue growing now, during a period where the industrial structure is experiencing major changes, every employee must become a leader in fostering a corporate culture of creativity and must take the initiative in their daily work. The Genroku period of the Edo era was a time of creativity and independence, since Japan transitioned from a focus on the samurai culture to one more focused on the average person. Talented individuals were produced in the new arts, such as *joruri* (music) and *kabuki* (theater), and new trends that would later give shape to modern Japan were born in the fields of academics, thought, and religion. I believe that in order to live during times of uncertainty, we must learn from history and demonstrate our uniqueness, such as during the Genroku period, enabling us to create value for the next generation.

Mizumoto It can probably be said that the reason why Tokuyama has remained in business for more than 100 years is because of the ability to respond flexibly to changes in business conditions and market trends during each era. If the Company takes advantage of the ability to look forward to figure out the changes that lie ahead, as well as the skills and knowledge accumulated within the Group, I believe that Tokuyama will definitely be able to achieve the goals of Medium-Term Management Plan 2025. President Yokota has also taken a proactive stance for co-creation with external partner companies and is committed to global environmental sustainability such as responding to the recommendations of the Task Force on Climate-related Financial Disclosures, as well as social contributions through the Company's businesses. I would like to see us, as External Directors, work to maximize the economic and social value that the Company provides, while sharing policies and strategies with the President.

Kawamori Since Tokuyama is a long-established corporation, for more than 100 years, there is a tendency for employee's attitudes to drift in a conservative direction. Taking this into consideration, Tokuyama's current management team is putting everything on the line by developing new business domains and cultivating overseas markets. The most important thing in corporate management is taking appropriate risks. There is a large market and need associated with risk taking. We, as External Directors and Audit and Supervisory Committee Members, will support the astute decisions of top management and drive ahead to create a corporate culture where employees can comfortably work energetically as well as the sound, sustainable growth of the Group.

Corporate Governance

Basic Stance

Amid the major transformations taking place throughout society, Tokuyama, in line with the business environment we face today, has redefined the corporate Mission as "To create a bright future in harmony with the environment, in collaboration with customers, based on chemistry." This redefinition incorporates the Company's desire to contribute to a sustainable society by pursuing business in harmony with the environment and working to create the future together with customers. This is only possible with the trust and support of shareholders, customers, suppliers, employees, local communities, and all other stakeholders, which the Company believes will fuel sustainable growth and greater corporate value over the medium to long term. Corporate governance includes a priority issue for management in order for the Company's Mission to be realized, and the Company therefore recognizes the need to constantly strive to make improvements.

In light of the Corporate Governance Code, the Company's Basic Policy is to respect the rights and equality of shareholders, cooperate effectively with all stakeholders, achieve the disclosure of information and transparency, maintain the independence of the Board of Directors and improve the Board's oversight, accelerate decision-making, clarify responsibility, and strive for constructive dialogue with shareholders.

Steps to Strengthen Our Governance Structure

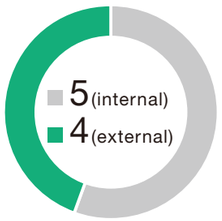
FY2018	Evaluation of effectiveness of Board of Directors conducted by external organization (conducted annually after that date) Introduction of performance-linked share-based remuneration plan
FY2019	Revision of criteria for determining independence of external directors
FY2020	Announcement of Tokuyama's New Vision Decision to abolish anti-takeover measures
FY2021	One external director added (to strengthen diversity of Board of Directors)
FY2022	Revision to "Basic Policy on Establishing the Internal Control System" (revision to a policy focused on Group management)
FY2023	Enhance policies, such as establishing the Tokuyama Group Sustainability Principles and the revision of the Tokuyama Group Code of Conduct

Corporate Governance Report
https://www.tokuyama.co.jp/eng/company/governance/index.html

Corporate Governance Structure

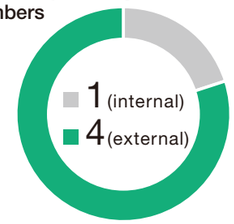
Number of Directors

8 males
1 female

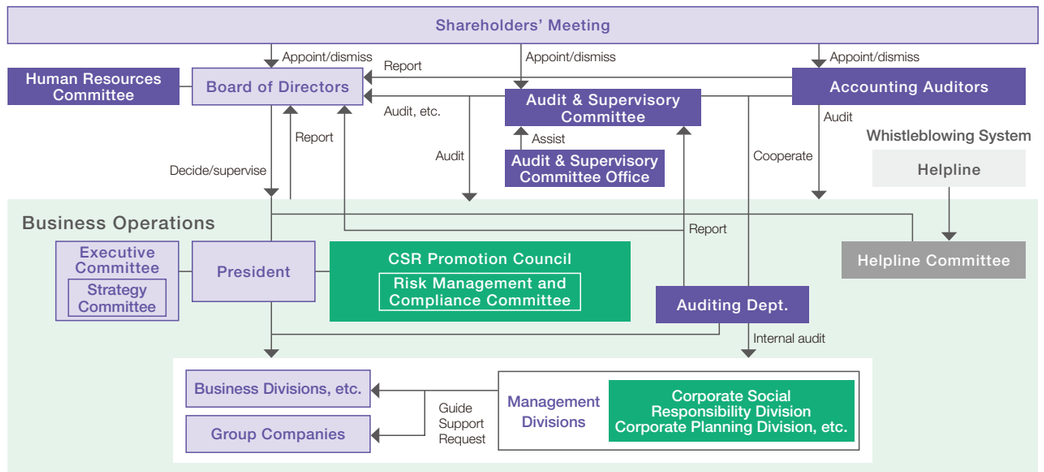


Number of Audit & Supervisory Committee members

4 males
1 female



Corporate Governance Structure



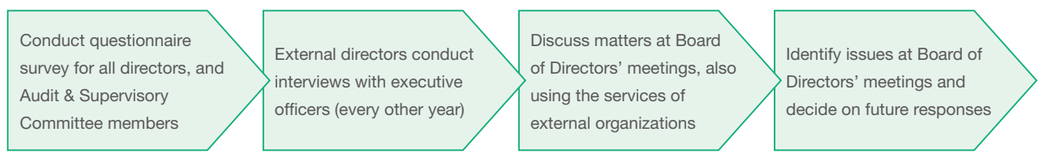
Meeting Bodies on Governance

Board of Directors	The Board of Directors supervises business operations in addition to deliberating on and making resolutions on important matters related to the activities of the Company • Number of meetings held in FY2022: 17
Audit & Supervisory Committee	Directors who are Audit & Supervisory Committee members attend meetings of the Board of Directors and other important internal meetings in order to gather information on the state of business operations. They also conduct audits on how well the executive officers are performing their duties. • Number of meetings held in FY2022: 24
Human Resources Committee	This committee holds discussions on such matters as the selection of director and executive officer candidates (excluding those on the Audit & Supervisory Committee) and their remuneration, before Board of Directors meetings take place.
Executive Committee	Members of the Executive Committee are selected by the president and executive officer (referred to here as "the president") from among the Company's other executive officers. The Executive Committee serves as the Company's decision-making body with respect to the execution of business operations. In principle, the committee meets two times each month. Based on the approval-related rules and regulations determined by the Board of Directors, the Executive Committee deliberates on and makes decisions on strategies and other important matters.
Strategy Committee	Members of the Strategy Committee are selected by the president from among the Company's executive officers. The committee meets once a month and serves as an advisory body to the president. In addition to deliberating on the direction of business execution, the Committee works to confirm the allocation of management resources with the aim of evaluating conditions relating to business execution in respect to important matters requiring approval. It also sets the direction of policies related to business execution with regard to specific projects.
CSR Promotion Council	Chaired by the president, the CSR Promotion Council includes all executive officers. The Committee sets CSR policies and goals, while also enabling initiatives to achieve those goals. The Committee focuses on maintaining effective corporate governance and internal controls, which together form the foundation of the Company's CSR. It also discusses important matters regarding internal controls.
Risk Management and Compliance Committee	Tokuyama's Risk Management and Compliance Committee, chaired by the director supervising the Corporate Social Responsibility Division, operates under the CSR Promotion Council. The Committee takes the initiative in promoting risk management and compliance, which are central to effective internal control.
Expert Committees	Tokuyama operates various committees focused on risk management and compliance in critical and specialized areas, separately from the Risk Management and Compliance Committee. These committees operate under the CSR Promotion Council: the Financial Reporting Committee, Fair Trade and Competition Committee, Security Trade Committee, Information Security Committee, Environment Committee, Safety Committee, and Product Safety and Quality Assurance Committee. From FY2022, a new Sustainability Committee was established to discuss areas that fall outside any existing framework, such as climate change and human rights.
Helpline Committee	The Helpline Committee is responsible for the administration of Tokuyama's helpline (whistleblowing) system that was established for the internal reporting of legally questionable actions and behavior by Group executives and employees.
Internal Audit Department	This department, established to be responsible for internal auditing, performs internal audits of divisions and departments of the Company as well as Group companies.

Analysis and Evaluation of Overall Effectiveness of the Board of Directors

Amid the major transformations taking place throughout society, the trust and support of stakeholders is essential for the Company to contribute to building a sustainable society by conducting business in harmony with the environment and working to create the future together with customers against a backdrop of today's challenging business environment. To earn and retain this trust and support, the Company has positioned corporate governance as a material issue for management, and consequently has determined to evaluate the effectiveness of the Board of Directors every year.

Evaluation Process



In the FY2022, the Company engaged an external organization to conduct a questionnaire survey of all the directors, and analyzed their responses. The results were submitted to the Board of Directors for review and discussion.

The evaluation revealed that the effectiveness of the Board of Directors is generally being confirmed. The evaluation also showed that initiatives to address the issues identified in the previous evaluation achieved a certain level of results overall. A high score was given for the board's monitoring and oversight of management team selection, evaluation, and compensation, while the score for communication with stakeholders was relatively low, making it a high-priority issue.

Additionally, the Board needs to keep focused on effective monitoring of the progress made on initiatives to address the priority issues identified in the Medium-Term Management Plan 2025. The Board of Directors will continue to monitor and oversee the executive management team as it steadily implements the Medium-Term Management Plan 2025 to achieve the plan's goals.

Adoption of Diverse Perspectives

Executive officers are appointed in each business segment and area based on their knowledge and experience to make certain that they direct the execution of business and make appropriate decisions with regard to the Company's business operations, centered on chemicals.

When nominating candidates for directorships, the Company selects those who have demonstrated a high level of insight, diverse experience and expertise, and then take into consideration the balance and diversity of the Board of Directors, in order to ensure the Board properly supervises and provides advice on important decisions and business operations.

When selecting and dismissing executive officers and nominating candidates for directorships (excluding directors who are Audit & Supervisory Committee members), discussions are held in advance of the subject appearing on the agenda at a Board of Directors' meeting at a meeting of the Human Resources Committee (an body that includes representative directors and external directors). The Board of Directors then makes decisions in response to the Human Resources Committee's report.

For the selection and dismissal of the President and Executive Officer, the President Nomination Committee deliberates on these matters, and the details of these deliberations are then presented to the Board of Directors following a report by the Human Resources Committee, at which point the Board of Directors makes a decision.

In the case of the nomination of directors who are Audit & Supervisory Committee member candidates, the Board of Directors makes decisions after receiving assent from the Audit & Supervisory Committee.

* See the Company's corporate website for the criteria used for determining the independence of external directors
https://www.tokuyama.co.jp/eng/company/governance/index.html

Skills Matrix of the Board of Directors

In light of the Company's Vision and Medium-Term Management Plan 2025, important skills are identified (see below) in areas where directors are expected to contribute for the Board of Directors to conduct effective discussions and exhibit the required decision-making and management-supervision abilities:

		Management Planning and Strategy	Sales and Marketing	Finance and Accounting	R&D, Production Technology and Engineering	CSR (Legal, ESG, Safety)	Utilization of Digital Technology	Overseas Business Operations
Internal	Hiroshi Yokota (Representative Director, President and Executive Officer)	●	●			●		●
	Hideo Sugimura (Representative Director, Senior Managing Executive Officer)	●		●		●	●	●
	Fumiaki Iwasaki (Director, Managing Executive Officer)	●	●		●	●	●	
	Tomohiro Inoue (Director, Managing Executive Officer)	●	●		●	●		●
	Youji Miyamoto (Director, Audit & Supervisory Committee Chair)	●		●		●		
External	Yuzo Kawamori (External Director, Audit & Supervisory Committee Member)	●	●	●		●		●
	Nobuko Mizumoto (External Director, Audit & Supervisory Committee Member)	●			●	●	●	
	Hiraku Ishizuka (External Director, Audit & Supervisory Committee Member)	●		●		●		
	Naoki Kondo (External Director, Audit & Supervisory Committee Member)	●		●		●		●

Note: The above list does not show all the knowledge and experience possessed by the directors.

Response to Chief Executive Officer Succession Plan

In August 2021, the Company established the President Nomination Committee, which formulates, implements, and deliberates on the Chief Executive Officer (President and Executive Officer) Succession Plan, and which reports to the Human Resources Committee.

The operations of the President Nomination Committee are regularly reported to the Board of Directors by the Human Resources Committee, and are audited by the Board, in order to ensure that enough time and resources are invested in the systematic training of succession candidates based on the Mission, Vision, and management strategies of the Company.

Director Training

Since 2001, the Company has maintained a policy of requiring newly appointed directors to participate in external executive training. Since the executive office system was introduced in 2011, all newly appointed Executive Officers participate in this training, as all of them are candidates for future directorships. The content of the training program can be selected based on the experience and knowledge of the individual, but with corporate governance in mind, the required content includes legal affairs and corporate governance as well as accounting and finance. The Company also allows participants to attend external seminars related to their corporate responsibilities on their own.

External directors are given the opportunity to visit factories and to learn about the Company when they take office, so that they can understand the current condition of the Company's businesses and operations.

Finally, the Company also holds study sessions, when needed, for all directors to gain a better understanding of domestic and international economic conditions, legal revisions, and new systems.

Executive Remuneration

Policy on Determining Individual Director Remuneration

The Company has established a policy for determining the content of remuneration for directors on an individual basis (excluding those who serve on the Audit & Supervisory Committee). The following is an overview of this information, where individual remuneration is determined by the Board of Directors following deliberations by the Human Resources Committee.*1

Basic Policy

1) The remuneration plan for the Company's directors is based on the following perspectives:
   - Ensures that directors contribute to charting sustainable growth for corporate performance and corporate value based on the Tokuyama Vision
   - Provides a level of remuneration that secures and retains human resources that can support the Company's management
   - Considers the performance of the Company
   - Employs a highly transparent, objective remuneration decision process
2) Remuneration for the Company's directors consists of basic remuneration and bonuses*2 in the form of monetary remuneration and performance-linked share-based remuneration in the form of nonmonetary remuneration.*3

Policy on Determining Director Remuneration on an Individual Basis

1) Basic remuneration
   - The basic remuneration (annual amount) is determined from a comprehensive perspective, taking into consideration the roles and responsibilities to be undertaken.
   - The determined basic remuneration is divided into 12 equal monthly payments.
2) Bonuses
   - Bonuses are determined on a scale from 0% to 150% of the standard bonus amount pre-determined for each position. Each bonus is calculated according to the degree of achievement with respect to performance targets set in advance for each fiscal year.
   - The performance targets are established based on the main financial performance targets for the entire Group.
   - The determined bonuses are paid at a fixed time of year.
3) Performance-linked share-based remuneration
   - Performance-linked share-based remuneration is based on the total number of standard points determined for each position during the target period, which is the fiscal years covered by the Medium-Term Management Plan. Tokuyama share options are granted to the individual on a scale of 0% to 150% of the standard points concerned, according to the level of achievement of the pre-determined performance targets.
   - The performance targets are established based on the main financial targets under the Medium-Term Management Plan.
   - In principle, the share options are only granted after the end of the target period.
4) Level of remuneration
   - The levels of remuneration are decided on using compensation survey data from specialized external agencies.

Policy on Determining the Percentage of Each Type of Remuneration for Directors

The percentage of remuneration for Company directors by type is determined after considering the ideal balance between the basic standard for the required roles/responsibilities on the one hand and incentives to stimulate the desire to achieve performance targets on the other.

Method for Determining Director Remuneration on an Individual Basis

1) Basic remuneration
   The final annual amount of basic remuneration for each individual is calculated and determined by the Representative Director, President and Executive Officer, having received authorization to do so from the Board of Directors, based on a standard amount predetermined for each position. The Human Resources Committee deliberates on whether the calculated basic remuneration is appropriate or not.
   As of FY2023, each individual's specific roles and responsibilities regarding important material issues for the realization of the Company's CSR management are taken into consideration. This is a factor in the calculation of an individual's remuneration, and part of the Company's ESG initiatives.
2) Bonuses
   Bonuses are determined by the Representative Director, President and Executive Officer, having received authorization to do so from the Board of Directors, based on performance for the target fiscal year after first determining the payment percentage in accordance with the standard bonus amounts for each position, the performance targets for the target fiscal year, and the achievement level for those targets.
   The Human Resources Committee deliberates on whether the performance targets, calculation methods, and calculation results are appropriate or not. The specific performance target for FY2023 is the target consolidated ordinary income set under the Medium-Term Management Plan. Each remuneration amount is calculated by multiplying the individual's standard amount by the performance-linked coefficient (ranging from 0% to 150%) set according to the degree of target achievement.
3) Performance-linked share-based remuneration
   The granting of share options as part of performance-linked share-based remuneration is based on the executive share-based remuneration regulations deliberated by the Human Resources Committee and adopted by the Board of Directors. The number of share options to be granted to each individual is calculated by multiplying the total number of standard points determined for the position concerned by the performance-linked coefficient (ranging from 0% to 150%) set according to the degree of target achievement.
   In addition, the specific performance target is the Company's target total consolidated operating income for the target period.

1. The Human Resources Committee is composed of a majority of external directors and they deliberate on issues related to human resources and remuneration regarding officers; the committee also serves as a voluntary advisory body for the Company that issues reports and makes recommendations to the Board of Directors.
2. Directors eligible for the bonus plan are those who are executive officers.
3. All directors, except those who serve on the Audit & Supervisory Committee, Non-executive Directors, External Directors, and those not residing in Japan, are eligible for the performance-linked share-based remuneration plan.

Amount of Remuneration Paid to Directors and Audit & Supervisory Committee Members (FY2022)

Subject of Remuneration	Number of People	Remuneration Amount
Directors (excluding directors who are Audit & Supervisory Committee members)	4	¥176 million
Directors who are Audit & Supervisory Committee members (excluding external directors)	1	¥29 million
External Directors	4	¥56 million

Notes: The above amount includes the expenses recorded for FY2022, as well as an adjustment of -25 million yen for the amount of expenses recorded for performance-linked share compensation, which takes into account the level of achievement of performance evaluation indicators (accumulated consolidated operating income, etc.) in FY2021 and FY2022 during the period covered by the plan.
The figures above do not include the employee salary portion for directors also serving in employee positions

Policy on Holding Listed Shares for Purposes Other than Pure Investment

The Company holds shares of publicly listed companies for strategic reasons in accordance with the requirements for business activities as part of the overall management strategy. This includes the need to maintain and bolster transactions, raise funds, and consistently procure raw materials. As far as the strategic holding of shares in publicly listed companies is concerned, the Company will limit holdings to the minimum level possible, taking into consideration the need to ensure efficient corporate management. The Company sold all shares of one listed issue in FY2022, resulting in a total of 20 listed issues of shareholdings as of March 31, 2022.

In addition, the Board of Directors takes steps to verify the economic rationality of holding shares in publicly listed companies by comparing capital costs that factor in associated risks with accrued benefits, while confirming the propriety of holdings based on a future outlook each year. The Company exercises voting rights in shares based on the contribution to corporate value for both the Company and the investee.

Risk Management

Strengthening Our Risk Management System

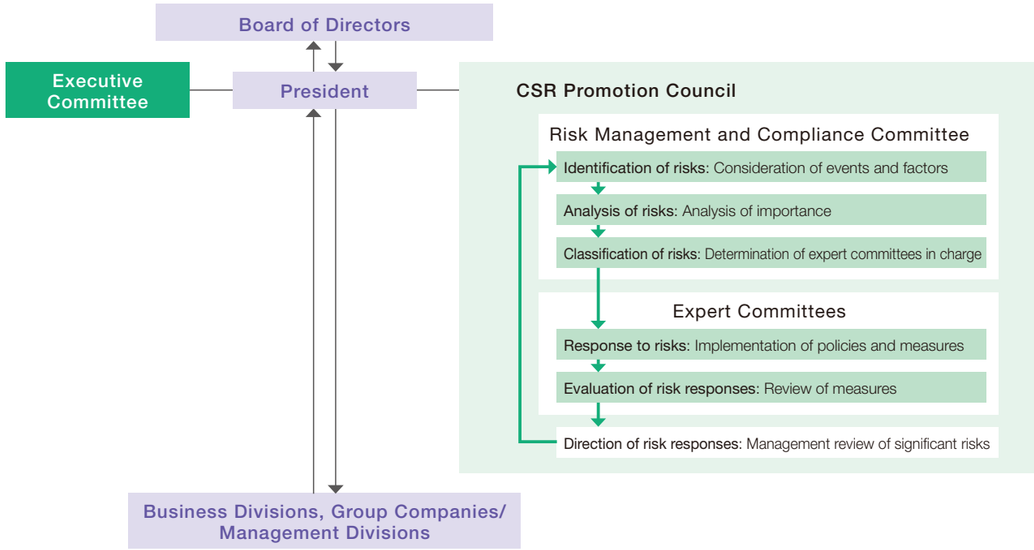
Tokuyama has established the Risk Management and Compliance Committee under the CSR Promotion Council as part of our company-wide risk management system, as outlined on p. 34: System to promote CSR management. The Risk Management and Compliance Committee considers events and issues that have recently emerged or that have undergone a change in the degree of impact, by monitoring social conditions and coordinating with other committees. This committee then assesses whether or not these are real risks and meets with expert committees to develop a response.

The Risk Management and Compliance Committee performs group-wide enterprise risk management by making visible and mapping risk levels both quantitatively and qualitatively from several perspectives: impact (monetary loss, decrease in market share, and scale of impact, etc.); occurrence frequency and probability; and Company's vulnerability.

The expert committees examine and determine mitigation policies for the risks they are responsible for (including risk reduction, avoidance, transfer, and retention). Based on the policies that are developed, the Group plans and implement ways to manage risks as well as conducts periodic reviews to check on the performance of the risk management system.

For instance, we are working to mitigate compliance risk by setting up management systems for understanding the laws and regulations that cover business execution. As well, we are tracking trends in amendments to those laws and regulations. The Company has established the Cybersecurity Department to prepare for changes in the business environment as well as cyberattacks, which have become increasingly sophisticated.

Process of Identifying Significant Risks



Business Continuity Management (BCM)

The Company has formulated, and continues to update, a BCP (business continuity plan) to ensure that circumstances do not prevent important operations from continuing. We also secure funding and resources to make certain that business keeps going, as we engage in business continuity management in normal times, including taking preventive measures, while we strengthen our ability to continue business operations.

To address the COVID-19 pandemic, the Company set up a crisis response headquarters in February 2020 with the President as general manager. The headquarters held six meetings in FY2022. Actions included notification of instructions issued by the government and industry bodies, infection prevention measures, and establishing a structure for contacts and public relations should an infection event occur. Crisis response measures included acquiring an understanding of infection responses and the state of production at business sites in and outside Japan, as well as recommending remote work and staggered commuting. With the main threat of the COVID-19 pandemic considered now over, the crisis response headquarters was disbanded on February 28, 2023, subsequently transitioning to liaison meetings with each department.

List of Enterprise Risks (FY2023)

*The chairperson of each committee/meeting body is a director and is responsible for managing the risks (risk owner)

Hazard risk (external environment risk) Risks posed by the external environment and potential events

Moderate category	Minimal category	Relevant committee/ meeting body*
Natural disasters	Earthquake, tsunami, weather-related disaster, abnormal weather event (typhoon, storm surge, heavy rains, etc.)	Risk Management and Compliance Committee
Accident or breakdown	Fire, explosion, chemical leak, equipment or device damage or failure, utility supply interruption, accident with aircraft, ship or railway	Safety Committee
Pandemic disease	Widespread outbreak of COVID-19 or another endemic infectious disease	Risk Management and Compliance Committee
Country risks	War, conflict, terrorism incident, riot, unlawful political change, or economic crisis	Risk Management and Compliance Committee
Information security risks	Cyberattack, virus infection, information leaks, failure of system facilities/equipment, system failure	Information Security Committee

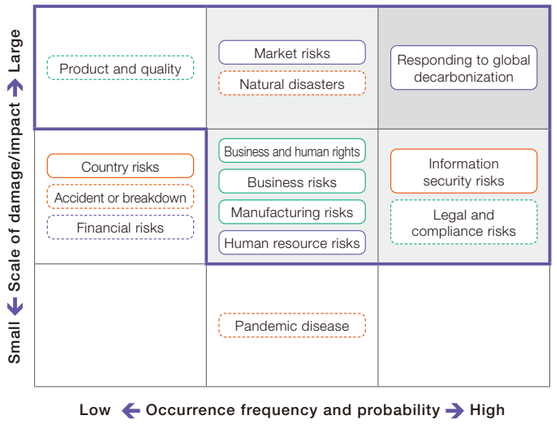
Business risk (strategic risk) Risks posed by the quality and accuracy of corporate strategies that affect performance and corporate value

Moderate category	Minimal category	Relevant committee/ meeting body*
Global decarbonization risks	Adoption of carbon pricing, adoption of international carbon taxation, progress of green procurement, popularization of ESG investment and environmental finance, tighter regulations, increased political pressure, and accelerating climate change	Sustainability Committee
Market risks	Changes in market needs, marketing failures or deficiencies, emergence of new competitors, product development failures or obsolescence, delays in responding to rapid technological innovations, and delays or barriers to overseas expansion	Executive Committee Board of Directors
Human resource risks	Mass turnover, difficulty in securing human resources, workforce aging, distorted human resource pyramid, failure to adopt new workstyles such as human resource development and technology transfer (including workers from overseas), and human resource mismatch due to business transitions	Executive Committee Board of Directors
Financial risks	Funding plan or financing failure, paid capital increase, suspension of financial support, interest rate or foreign exchange rate fluctuation risk, and stock price decline	Executive Committee Board of Directors

Operational risk (business process risk) Risks arising from deficiencies in internal processes related to business execution, or from inadequate functions

Moderate category	Minimal category	Relevant committee/ meeting body*
Manufacturing risks	Equipment or machine stoppages or accidents due to operating errors, industrial accidents, and aging equipment or machinery	Safety Committee
Business risks	Soaring raw material or fuel prices, failed pricing policies, declining price competitiveness, dependence on a small number of suppliers, and dependence on a small number of customers	Executive Committee Board of Directors
Serious product defects or quality risks	Quality defects, voluntary recalls, product liability accidents, deficiencies in chemical safety management when exported, management of chemical substances contained in products, and mislabeling or counterfeit labeling	Product Safety and Quality Assurance Committee
Business and human rights	Human rights violations in supply chains, boycotts, and consumer movements	Sustainability Committee
Legal and compliance risks	Non-performing loans/bad debts, intellectual property rights infringement, invention compensation disputes, antimonopoly law violation, Unfair Competition Prevention Act violation (bribery), improper contract signing, insider trading, inadequate management of licenses and permits, misconduct involving executives or employees, ties to antisocial forces, and intimidation	Fair Trade and Competition Committee Risk Management and Compliance Committee

Mapping of Significant Enterprise Risks



Definition of scale of damage and impact

Large ↑	Damage that threatens the survival of the company, as well as substantial damage such as loss of assets
Moderate	Significant decrease of profits, or minor loss of assets
Small ↓	Little impact on corporate profits and assets

Definition of occurrence frequency and probability

High →	Occurs more than once a year; Will almost certainly occur in the near future
Moderate	Occurs several times a decade
Low ←	Occurs once every decade or more

Definition of vulnerability

High	Mitigation measures have not been implemented or are completely inadequate
Moderate	Some measures have been implemented, but they are still insufficient
Low	effective measures have been implemented and a management cycle is in place

Financial and Non-Financial Highlights

Financial Analysis of FY2022

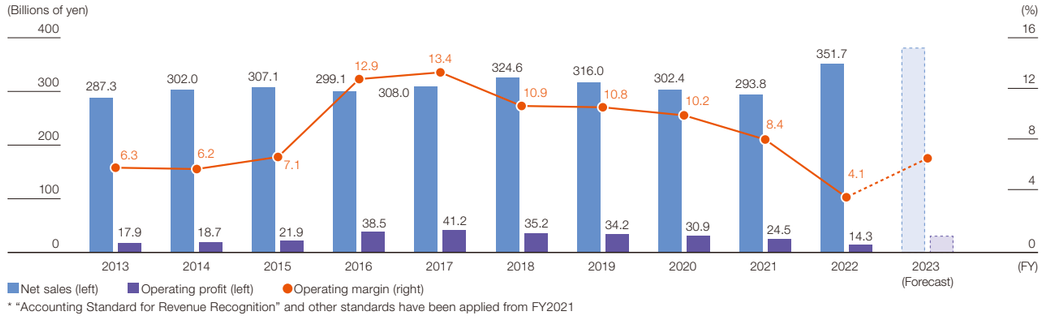
In FY2022, factors such as revised sales prices in chemicals, cement, and semiconductor-related products led to an increase in sales over the previous fiscal year. However, other factors, such as higher raw fuel costs and logistics expenses as well as a slump in market conditions, caused a fall in operating profits. Also, for the current net income attributed to shareholders of the parent company, factors such as weakening profitability have caused a decrease in profits as well as lower ROE.

In FY2023, despite the predicted effects of a slowing market for semiconductors, sales and profits are expected to increase over the previous fiscal year due to revised sales prices for chemicals and cement as well a calming down of raw fuel costs. Also, we anticipate a decrease in depreciation and amortization due to a change (as of FY2023) to a straight-line method from the declining-balance method used for the depreciation of tangible fixed assets.

To achieve the targets of our Medium-Term Management Plan 2025, we will continue investing in growth fields—intended to transform our business portfolio—as well as investments and initiatives to help mitigate global warming.

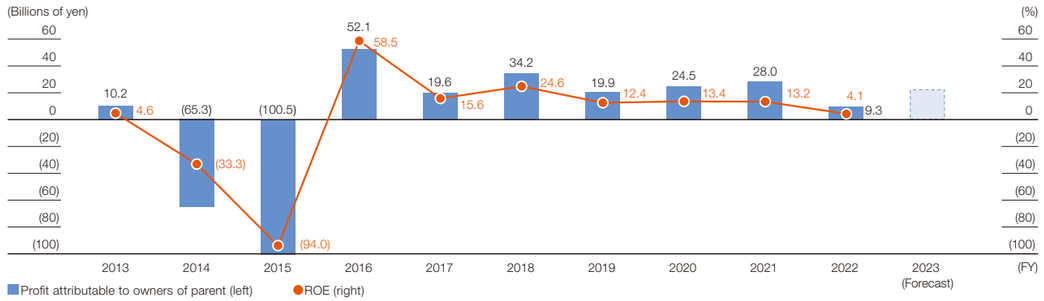
Financial Highlights

Net Sales / Operating Profit / Operating Margin

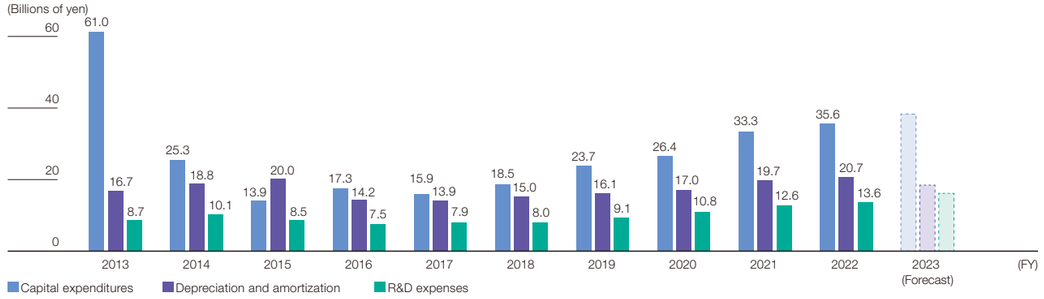


* "Accounting Standard for Revenue Recognition" and other standards have been applied from FY2021

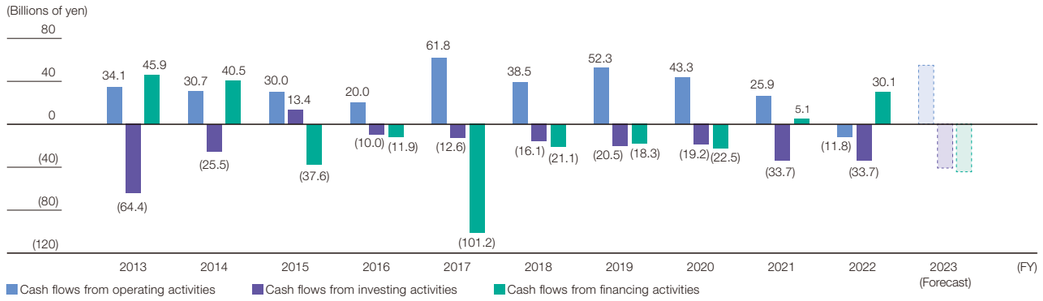
Profit Attributable to Owners of Parent / ROE



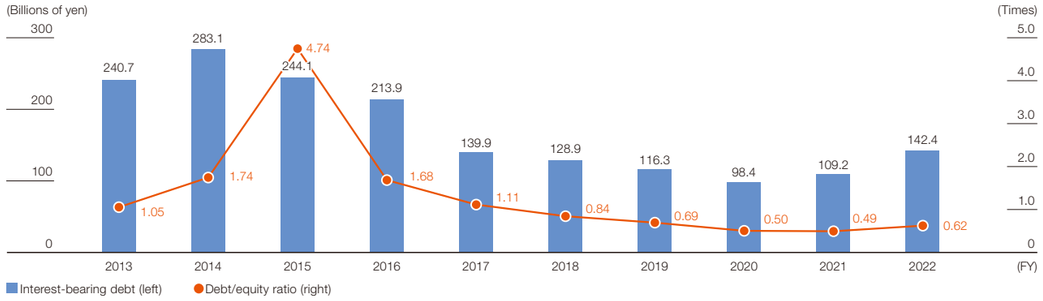
Capital Expenditures / Depreciation and Amortization / R&D Expenses



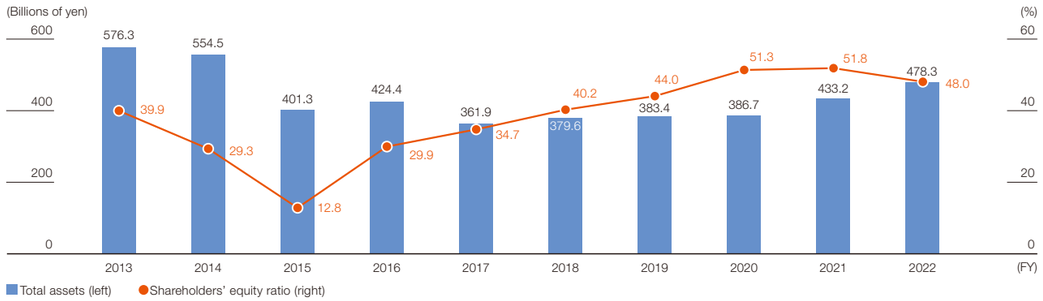
Cash Flows



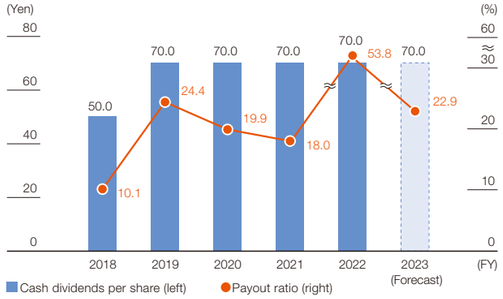
Interest-Bearing Debt and Debt/Equity Ratio



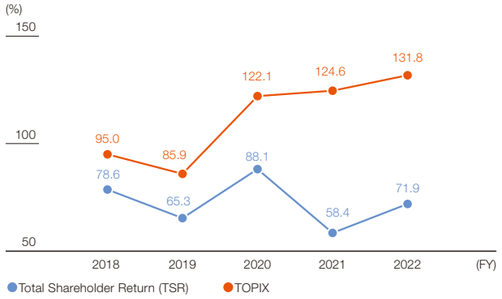
Total Assets / Shareholders' Equity Ratio



Cash Dividends per Share / Payout Ratio

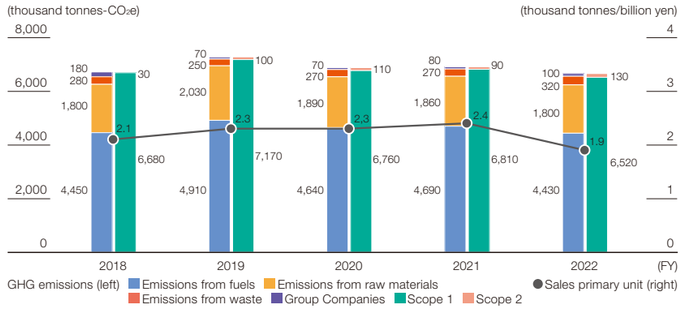


Total Shareholder Return (TSR)



Non-Financial Highlights

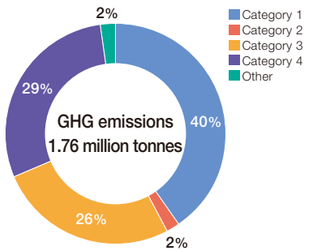
GHG Emissions



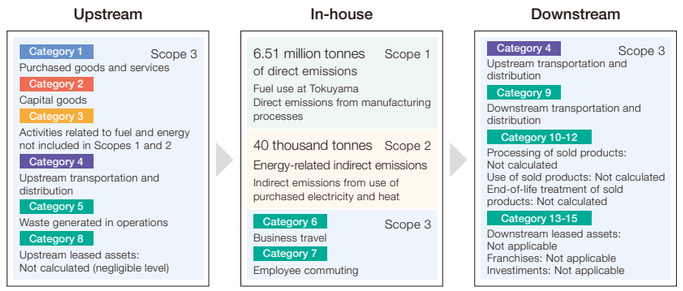
* The values for FY2018 were calculated based on the SHK System, while the values for FY2019 to FY2022 were calculated based on the GHG Protocol.

We recognize that the mitigation of global warming is one of the most critical issues today and are working hard to reduce greenhouse gas (GHG) emissions. GHG emissions are the total emissions of gases such as CO_2, CH_4 and N_2O; of these, CO_2 emissions account for approximately 99.8% of the volume of emissions. GHGs are generated mainly by the combustion of fossil fuels in captive power plants, as well as by the decarboxylation of limestone (raw material) in the cement manufacturing process. GHG emissions in FY2022 were 6,650 thousand tonnes.

Supply Chain Emissions* (Scope 3, non-consolidated)

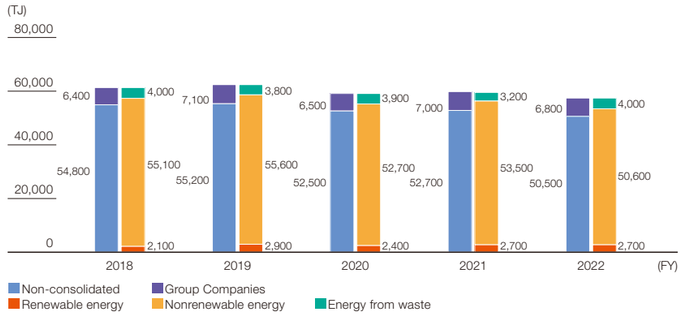


* Due to rounding, sum of figures in breakdown does not equal total amount



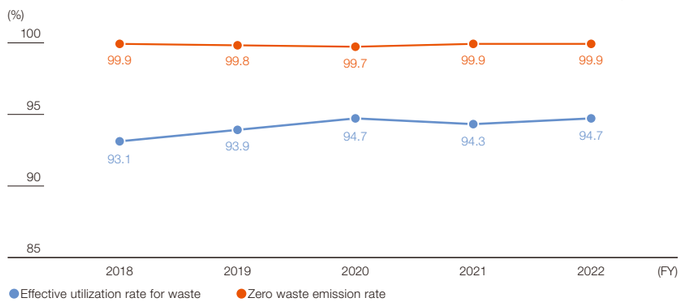
* GHG Protocol: organization co-sponsored by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD); Scope 3 standard: standard issued by said protocol in November 2011 for calculating CO_2 emissions across an entire supply chain.

Energy Usage



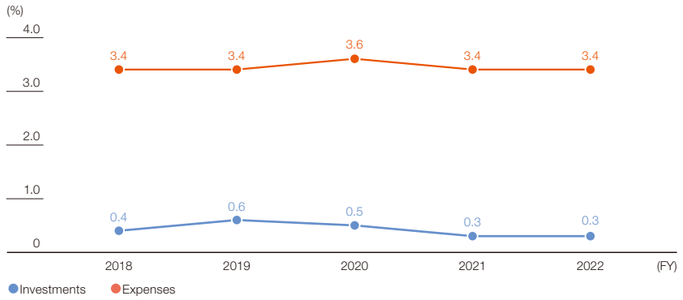
We encourage energy conservation as a way to mitigate global warming. Through energy conservation, we are promoting using less electric power and steam in production, and we are encouraging more adoption of renewable energy. In FY2022, the percentage of renewable energy use throughout the entire Group was approximately 5%.

Effective Utilization Rate for Waste / Zero Waste Emission Rate (Non-consolidated)



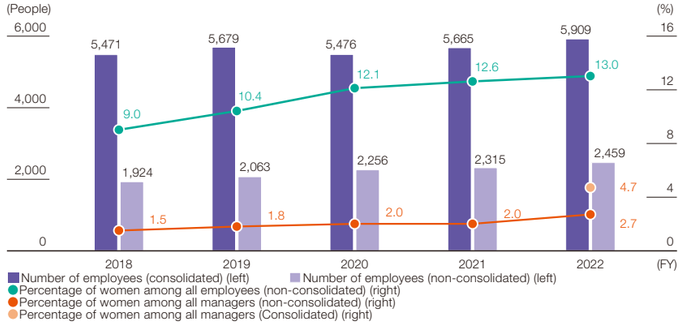
The effective utilization rate for waste and the zero emission rate remained high in FY2022 due to efforts to reduce the volume of waste and comprehensive recycling efforts. As a result of actively promoting the recycling of waste generated both internally and externally, with a focus on the reuse of waste as feedstock and fuel for cement at the Tokuyama Factory, the effective utilization rate for waste was 94.7% and the zero waste emission rate was 99.9%.

Environmental Accounting (Percentage of Net Sales)



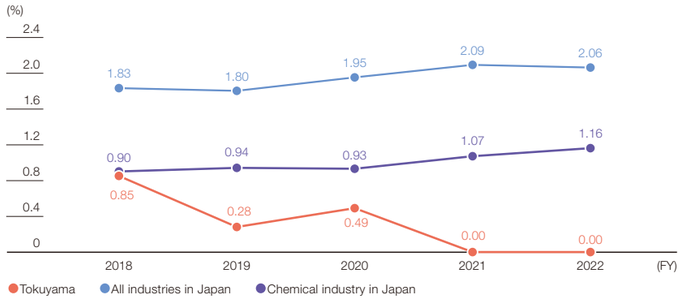
Environmental accounting has been conducted since FY2000 for the purpose of ascertaining and analyzing the investments and expenses required for conserving the environment, and for the purpose of facilitating effective investment. The amount of investment for conserving the environment was 0.3% of net sales and the total expenses incurred for this purpose were 3.7%. The amount of investment as a percentage of net sales has ranged from 0.3 and 0.8% over the past several years, while the total amount of expenses has been between 3.2 and 3.8%. In FY2022, the Company updated electric precipitators to tackle soot, smoke, and dust, and we modified and upgraded equipment for reducing CO_2 emissions.

Number of Employees / Percentage of Women among All Employees / Percentage of Women among All Managers



Tokuyama is committed to the idea of *diversity in knowledge*, and for this reason promotes diversity by utilizing the varied values and perspectives of every employee in corporate activities. The small number of female staff is the cause for the low percentage of females in each indicator. However, we are experiencing a steady increase in the number of female employees working actively at worksites. For example, there is a gradual increase in the percentage of female staff working in management. We appointed our first female outside director in June 2021 and our first female executive officer in April 2023.

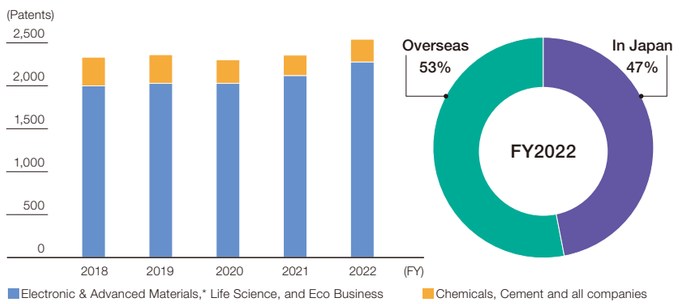
Accident Frequency Rates*



One of our safety management goals is to achieve zero accidents and lost time injuries, and we are working to identify and eliminate risk factors, as well as to understand and recognize the behavioral characteristics of each individual to eliminate unsafe behavior. There were no lost time injuries to employees in FY2022. We will continue our efforts to maintain zero lost time injuries.

*Accident frequency rates indicate frequency of occupational injuries, and are expressed as number of employees absent from work due to occupational injuries per 1 million total working hours

Number of Patents Held



*On April 1, 2023, the name was changed to Electronic & Advanced Materials

We aim to be a value-creative company that places first priority on R&D and marketing, and we recognize that investment in intellectual property is essential to achieve this. As we promote global business expansion initiatives in the fields of electronics, healthcare, and the environment to refresh our business portfolio, our patent rights include many technologies in these three areas, and we are focusing on acquiring patent rights both domestically and overseas.

Management Team (as of June 23, 2023)

*From left to right: Fumiaki Iwasaki, Yuzo Kawamori, Tomohiro Inoue, Hiroshi Yokota, Nobuko Mizumoto, Hiraku Ishizuka, Naoki Kondo, Hideo Sugimura, Youji Miyamoto

Hiroshi Yokota

Representative Director, President and Executive Officer
In charge of Chemicals, Cement, Electronic & Advanced Materials, Center for Commercialization of Advanced Technology, Auditing Office

- Date of birth: October 12, 1961
- Number of Company shares owned: 32,600
- Tenure as director: 8 years
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: 17/17 (100%)

Utilizing extensive experience in personnel and labor issues, traditional businesses, and advanced materials businesses, he is actively working on the promotion of the priorities of Medium-Term Management Plan 2025, such as transforming the business portfolio, carbon neutrality, implementing CSR management, etc.

Hideo Sugimura

Representative Director, Senior Managing Executive Officer, General Manager of Corporate Planning Division
In charge of Corporate Planning, Corporate Social Responsibility, General Affairs and Human Resources, Procurement and Logistics, Secretarial Department, Digital Administration, Carbon Neutral Strategy

- Date of birth: October, 22, 1959
- Number of Company shares owned: 6,903
- Tenure as director: 6 years
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: 17/17 (100%)

With extensive operational experience including the introduction of an information system, management of an overseas subsidiary, and restructuring a domestic subsidiary, he is engaged in promoting growth by developing plans and strategies as a general manager of corporate departments.

Fumiaki Iwasaki

Director, Managing Executive Officer, General Manager of Research and Development Division, and General Manager of New Business Division
In charge of Life Science, New Business, Research and Development, Environment & Safety of Kashima Factory

- Date of birth: June 21, 1960
- Number of Company shares owned: 2,642
- Tenure as director: 3 years
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: 17/17 (100%)

Making use of the extensive experience gained through the fields of R&D and manufacturing technology, he is pursuing new research and development.

New election

Tomohiro Inoue

Director, Managing Executive Officer, General Manager of Eco Business Division, and Deputy General Manager of Cement Business Division
In charge of Eco Business, Tokuyama Factory

- Date of birth: December 8, 1964
- Number of Company shares owned: 1,700
- Tenure as director: -
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: -

He is proactively working on the promotion of a broad range of businesses based on rich knowledge accumulated through his experience in overseas operations, planning, business promotion projects, and experience as General Manager of the Manufacturing Dept.

Principal Concurrent Positions: Director, ASTOM Corporation

Youji Miyamoto

Director, Audit & Supervisory Committee Chairperson

- Date of birth: January 22, 1958
- Number of Company shares owned: 2,200
- Tenure as director: 6 years
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: 17/17 (100%)
- Attendance at meetings of the Audit & Supervisory Committee during the fiscal year ended March 31, 2023: 24/24 (100%)

With a high degree of expertise in finance and accounting gained through his years of accounting operations, he has been supervising management as an Audit & Supervisory Board member since 2013, and as a director who is an Audit & Supervisory Committee member since 2017.

Significant concurrent positions: Auditor, ASTOM Corporation; Auditor, Tokuyama Dental Corporation; Audit & Supervisory Board Member, A&T Corporation

Yuzo Kawamori

External Director, Audit & Supervisory Committee Member

- Date of birth: July 25, 1947
- Number of Company shares owned: 1,700
- Tenure as director: 4 years
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: 17/17 (100%)
- Attendance at meetings of the Audit & Supervisory Committee during the fiscal year ended March 31, 2023: 24/24 (100%)

Possessing extensive experience and broad insight into the manufacturing industry as a corporate manager, he has been supervising management of the Company as an external director who has been an Audit & Supervisory Committee member since 2019, and provides useful advice on the promotion of overseas business among other items.

Nobuko Mizumoto

External Director, Audit & Supervisory Committee Member

- Date of birth: March 31, 1957
- Number of Company shares owned: 500
- Tenure as director: 2 years
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: 17/17 (100%)
- Attendance at meetings of the Audit & Supervisory Committee during the fiscal year ended March 31, 2023: 24/24 (100%)

Possessing extensive experience and broad insight in the manufacturing industry as a corporate manager, she has been supervising management of the Company as an external director who has been an Audit & Supervisory Committee member since 2021, and provides useful advice on carbon neutrality, digital transformation, CSR management, and other items.

Principal Concurrent Positions:
Outside Director, Okamura Corporation (Scheduled to assume office in June 2023)

New election

Hiraku Ishizuka

External Director, Audit & Supervisory Committee Member

- Date of birth: December 29, 1960
- Number of Company shares owned: 0
- Tenure as director: -
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: -
- Attendance at meetings of the Audit & Supervisory Committee during the fiscal year ended March 31, 2023: -

He possesses an abundance of experience and broad insight as a corporate manager in financial institutions, therefore based on his knowledge on finance and accounting and insights into finance and the overall economy, he is expected to effectively supervise the management of the Company and to give useful opinions and advice.

Principal Concurrent Positions: Representative Director & Chairman, Mitsubishi UFJ NICOS Co., Ltd.

New election

Naoki Kondo

External Director, Audit & Supervisory Committee Member

- Date of birth: December 4, 1973
- Number of Company shares owned: 0
- Tenure as director: -
- Attendance at meetings of the Board of Directors during the fiscal year ended March 31, 2023: -
- Attendance at meetings of the Audit & Supervisory Committee during the fiscal year ended March 31, 2023: -

Based on his specialist perspective and rich experience as a lawyer, he is expected to expertly supervise the management of the Company and to actively give useful opinions and advice.

Principal Concurrent Positions: Partner, Oh-Ebashi LPC & Partners
Outside Director (Audit & Supervisory Committee Member), ibis inc.

Corporate Data (as of March 31, 2023)

Company Overview

Corporate name	Tokuyama Corporation
Established	February 16, 1918
Industry	Chemical manufacturing
Location	**Tokyo Head Office** Front Place Akihabara 7-5 Sotokanda 1-chome, Chiyoda-ku, Tokyo 101-8618, Japan TEL. +81-3-5207-2500 FAX. +81-3-5207-2580 **Tokuyama Factory (Registered Address)** 1-1 Mikage-cho, Shunan-shi, Yamaguchi 745-8648 Japan TEL. +81-834-34-2000 FAX. +81-834-33-3790
Capital	¥10,000 million
Number of employees	5,909 (consolidated basis; 738 working overseas) 2,459 (non-consolidated)
Number of group companies	56

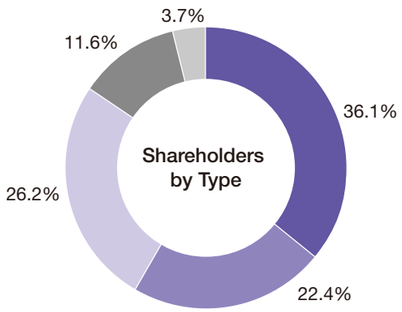
Stock Information

Total number of shares authorized to be issued	Common shares: 200,000,000 shares
Number of shares issued	72,072,056 common shares (excluding 16,271 treasury shares)
Common Stock Listings	Tokyo Stock Exchange Prime Market
Securities Code	4043
Number of shareholders	Common shares: 25,667 shareholders
Fiscal year	From April 1 to March 31

Dividend Policy

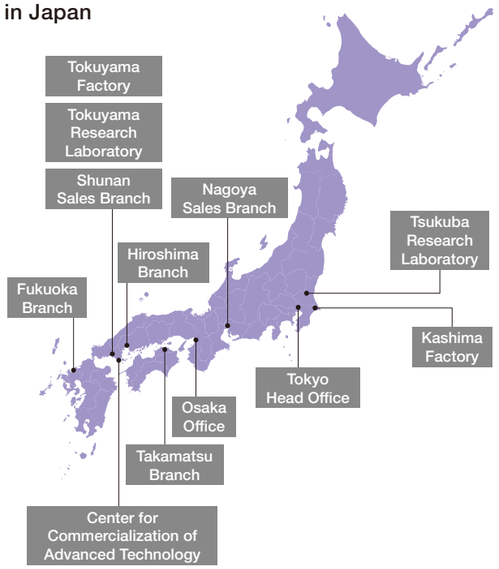
Dividends will be paid to the shareholders stated in the final version of the register of shareholders on March 31 and September 30. As far as the distribution of profits is concerned, Tokuyama's basic policy is to ensure the continuous and stable payment of dividends to shareholders. In carrying out this policy, the Company takes into consideration performance trends, the dividend payout ratio, and the roadmap established under the medium- to long-term business plan.

Shareholders by Type

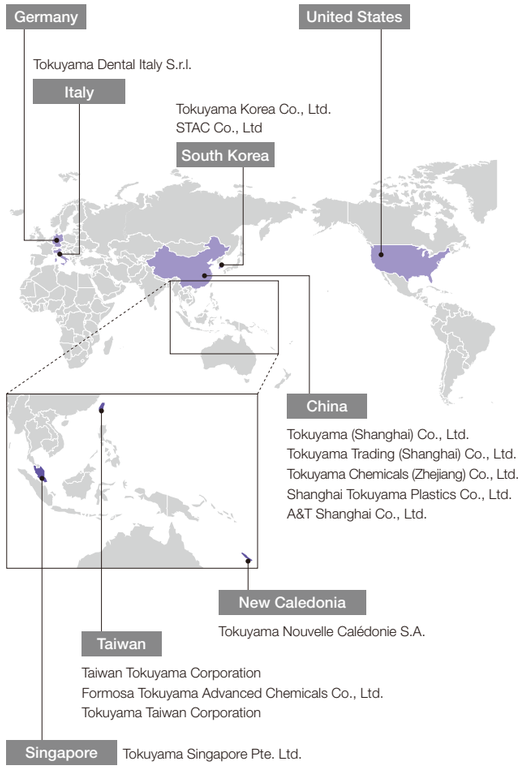


- Securities companies (26,044 thousand shares)
- Individuals/Others (16,146 thousand shares)
- Non-Japanese Corporations/Overseas residents (18,911 thousand shares)
- Other domestic corporations (8,334 thousand shares)
- Financial institutions (2,651 thousand shares)

Tokuyama Corporation Business Sites in Japan



Consolidated Subsidiaries Overseas



Consolidated Subsidiaries

Electronic & Advanced Materials[1]

Tokuyama Chemicals (Zhejiang) Co., Ltd.[2]
Production and sale of fumed silica, high-purity chlorosilane, high-purity chemicals for electronics manufacturing

Formosa Tokuyama Advanced Chemicals Co., Ltd.[2]
Production and sale of high-purity chemicals for electronics manufacturing

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

STAC Co., Ltd.
Production and sale of high purity chemicals for electronics manufacturing

Tokuyama-Dowa Power Materials Co., Ltd.
Production and sale of aluminum nitride substrates

Tokuyama METEL Corporation
Production and sale of industrial cleaners

Life Science

Shanghai Tokuyama Plastics Co., Ltd.[2]
Production and sale of microporous film

Tokuyama Dental Corporation
Production and sale of dental materials and equipment

Tokuyama Dental America Inc.
Sale of dental materials and equipment

Tokuyama Dental Deutschland GmbH
Sale of dental materials and equipment

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

A&T Corporation
Production and sale of diagnostic reagents, analyzers and systems

A&T Shanghai Co., Ltd.
Sale of diagnostic reagents, analyzers and systems

ASM Inc.
Development, manufacture and sale of Polyrotaxanes related products

One other company

Eco Business

ASTOM Corporation
Production, sale and maintenance of ion-exchange membranes and related equipment

Tokuyama Chiyoda Gypsum Co., Ltd.
Collection of waste gypsum board, production and sale of gypsum dihydrate, operation of waste gypsum board recycling business

Excel Shanon Corporation[3]
Production and sale of plastic window sashes

Tohoku Shanon Co., Ltd.[4]
Production and sale of plastic window sashes

FL Tokuyama Corporation
Sale of plaster sheets and items made from plaster sheets

Chemicals

Shin Dai-ichi Vinyl Corporation[2]
Production and sale of PVC resin

Tokuyama Soda Trading Co., Ltd.
Stocking and sale of soda ash and calcium chloride

Sun Arrow Kasei Co., Ltd.
Production and sale of PVC resin compounds

Cement

Tokuyama Nouvelle Calédonie S.A.
Production and sale of cement

Tokuyama MTech Corporation
Processing and sale of building materials and chemical products

Tokuyama Tsusho Trading Co., Ltd.
Stocking and sale of cement and ready-mixed concrete

Kansai Tokuyama Trading Co., Ltd.[5]
Stocking and sale of cement and ready-mixed concrete

Tokushou Co., Ltd.[5]
Stocking and sale of cement and ready-mixed concrete

Tokushin Co., Ltd.[5]
Stocking and sale of cement and ready-mixed concrete

Tokuyama Art Block LABO Co., Ltd
Production and sale of interlocking block

Tokyo Tokuyama Concrete Co., Ltd.
Production and sale of ready-mixed concrete and concrete products

Kawasaki Tokuyama Ready Mixed Concrete Co., Ltd.
Production and sale of ready-mixed concrete

Chugoku Ready Mixed Concrete Co., Ltd.
Production and sale of ready-mixed concrete

Hiroshima Tokuyama Ready Mixed Concrete Co., Ltd.
Production and sale of ready-mixed concrete

Seibu Tokuyama Ready Mixed Concrete Co., Ltd.
Production and sale of ready-mixed concrete

Shirokawa Co., Ltd.
Production and sale of ready-mixed concrete

Kagawa Tokuyama Co., Ltd.
Sale of cement and construction materials, production and sale of ready-mixed concrete

Kyushu Tokuyama Ready Mixed Concrete Co., Ltd.
Production and sale of ready-mixed concrete

Toyomi Co., Ltd.
Production and sale of ready-mixed concrete

Notsuharu Co., Ltd.
Production and sale of ready-mixed concrete

Other

Tokuyama (Shanghai) Co., Ltd.
Management company to provide services for other group companies in China

Tokuyama Trading (Shanghai) Co., Ltd.
Sale of Tokuyama Group products

Tokuyama Taiwan Corporation
Marketing and R&D of growth businesses

Tokuyama Korea Co., Ltd.
Sale of Tokuyama Group products

Tokuyama Singapore Pte. Ltd.
Production and sale of high purity chemicals for electronics manufacturing
Sale of Tokuyama Group products

Tokuyama America Inc.
Sale of Tokuyama Group products

Tokuyama Europe GmbH
Sale of Tokuyama Group products

Shunan System Sangyo Co., Ltd.
Civil engineering, construction work and planning; on-site contracted factory work; stocking and sale of construction materials

Shunan Swimming Club Co., Ltd.
Operation of health promotion facilities including swimming and fitness clubs

Tokuyama Kairiku Unso K.K.
Shipping, transportation and warehousing

Kyoueisekiyu Corporation
Petroleum-related business

Yamaguchi Kisen Corporation
Marine transportation

Shunan Kairiku Unso Limited
Freight forwarding

Shunan Bulk Terminal Co., Ltd.
Warehouse operations for bulk cargoes of coal, etc.

Tomitec Co., Ltd.
Production and sale of plastic molded products

Super Nano Design Co., Ltd.
Design, manufacture and sale of nanomaterials

1 On April 1, 2023, the name was changed to Electronic & Advanced Materials
2 Specified subsidiary
3 On July 3, 2023, became affiliated company accounted for by the equity method.
4 On April 1, 2023, merged with Excel Shanon Corporation.
5 On April 1, 2023, merged with Tokuyama Tsusho Trading Co., Ltd.
Note: On January 1, 2023, Tokuyama Information Services Corporation was acquired by Tokuyama Corporation.

For the People of Tomorrow

TOKUYAMA

Tokuyama Corporation

Front Place Akihabara
7-5 Sotokanda 1-chome, Chiyoda-ku, Tokyo 101-8618, Japan
Corporate Social Responsibility Division
https://www.tokuyama.co.jp/eng/