


TOKUYAMA 



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Representative Director  
President and Executive Officer

We would like to express our appreciation to all involved in the fight against the new coronavirus (COVID-19). We sincerely hope those who are suffering from the virus will recover as soon as possible. We are striving to prevent the spread of the infection to our customers, employees and other stakeholders. We will take every measure possible in the hope that the pandemic will quickly subside.

 **Tokuyama Continues to Grow with Society**

In the Medium-Term Management Plan: Cornerstone of the Group's Revitalization, which was formulated in May 2016, Tokuyama defined its mission as "Centered on the field of chemistry, the Tokuyama Group will continue to create value that enhances people's lives." We strive to provide a stable supply of products needed in society.

Our history started with chemicals, particularly soda ash, which was the reason for the foundation of Tokuyama. Since then, the Company has been developing and manufacturing products that support and enhance people's lives, including cement in the high economic growth period and semiconductor-grade polycrystalline silicon and high-purity chemicals for electronics manufacturing in the IT revolution in the 1990s.

Society is now in a position where it must achieve the Sustainable Development Goals (SDGs) to be

sustainable. The Company will expand its products, technologies and businesses that help build a sustainable society, while widening and deepening its manufacturing to take advantage of its strengths more speedily using its unique chemical technologies.

## Results in Fiscal 2019

In 2019, U.S.-China trade friction increased uncertainty surrounding the future of the world economy. International trade and investment slowed, which slowed economies. From the beginning of 2020, economic activity was sluggish and consumer spending fell around the world due to COVID-19. Against this backdrop, the Japanese economy declined significantly.

The effect of the coronavirus on the Company's results in the fourth quarter of fiscal 2019 was relatively small. However, net sales in the fiscal year fell year on year, reflecting a decrease in the sales volume of mainstay products as a slowdown in the markets became more apparent. Despite the weak sales performance due to the deterioration of the market environment, the decline in profit was less significant compared with the fall in net sales owing to our avid pursuit of profits.

The Specialty Products segment, primarily in the ICT business, and the Life & Amenity segment, primarily in the healthcare business, which are positioned as growth businesses, struggled, showing a sluggish performance in the first half, chiefly because of U.S.-China trade

friction. However, in the second half, these segments, primarily semiconductor-related products, strove to recover lost ground and make a profit.

As for traditional businesses, the Chemicals segment posted a decrease in profit due to higher raw material prices and lower market prices overseas despite the firm sales volume of caustic soda, a mainstay product. In the Cement segment, sales volume was weak, reflecting a fall in demand, but we strove to maintain sales prices and increased market share.

## Progress of the Medium-Term Management Plan

Of the four priority issues in the Medium-Term Management Plan, "Change the Group's Organizational Culture and Structure" remains a top priority. Tokuyama's greatest assets are its people. We believe that recruiting, cultivating and utilizing excellent human resources are the most important things for the Company's survival, growth and development. The purpose of "Change the Group's Organizational Culture and Structure" is to create a vibrant corporate culture where each employee carries out tasks independently and promptly. I believe, as president, that this is my greatest mission.

Our efforts have resulted in faster actions in selecting research and development topics, building pipelines for new operations and launching new businesses in

### Business Strategies

	Aspirations	Means of Achieving Goals	Key Management Indicators
<b>Growth Businesses</b> ▶ Specialty Products ▶ Life & Amenity ▶ New businesses	<b>Become a global leader in advanced materials through unique technologies</b> • Thoroughly understand customers' needs, and meet requirements through unique technologies	<ul style="list-style-type: none"> <li>• Adhere strictly to customer-oriented business activities</li> <li>• Utilize open innovation</li> <li>• Leverage alliances</li> <li>• Review the research and development structure</li> </ul>	EBITDA growth rate
<b>Traditional Businesses</b> ▶ Chemicals ▶ Cement	<b>Become a leader in Japan by strengthening competitiveness</b> • Overcome competition in the general-purpose products market • Become an entity that maintains a thirst for increased efficiency	<ul style="list-style-type: none"> <li>• Adopt a stringent approach toward maintaining and renewing investments; undertake strategic investments aimed at strengthening competitiveness</li> <li>• Increase the efficiency of repairs and maintenance expenses by shortening the periods of periodic maintenance</li> <li>• Strengthen cross-departmental improvement activities</li> <li>• Leverage alliances</li> </ul>	ROA, Cash conversion cycle (CCC)

## Top Message

growth businesses. We will expand this corporate culture across the entire Company and will establish a strong business structure that will enable us to grow sustainably as a top manufacturer with the ability to manufacture products that are overwhelmingly superior to those of our competitors in the international market in terms of cost, functionality and quality.

We are actively recruiting work-ready human resources with experience and techniques in specific fields in growth businesses.



We are restructuring our business strategies. In the ICT field, which is a focus, expansion work has been completed as scheduled for aluminum nitride, a thermal management material that is used primarily in environmentally friendly vehicles, renewable energy and 5G products and is expected to grow in the medium- to long-term, and a photoresist developer, a chemical used in semiconductor processing.

New seeds are beginning to bear fruit in the health-care business, another field of focus, including the development of a new manufacturing process for biotin, a vitamin; the commercialization of materials related to veterinary medicine; and the launch of OMNICHROMA, a cavity-filling composite resin, in Europe and the United States. We will continue to steadily implement growth strategies in the fields of ICT and healthcare.

To strengthen the Group's management, we have decided to accept investment from Panasonic Corporation through a private placement to strengthen and develop the plastic window sashes business of Excel Shanon Corporation. Excel Shanon is a specialized manufacturer of plastic window sashes and aims to expand the plastic window sashes business by tapping

into energy saving needs and cooperating with Panasonic, which manufactures a range of building materials. The Group companies involved in logistics are striving to cut costs by reorganizing them to increase efficiency.

Of the targets related to the improvement in our financial position included in the Medium-Term Management Plan, the ROA and CCC targets are not likely to be achieved, but interest-bearing debt of ¥120.0 billion, shareholders' equity of ¥140.0 billion, cash and deposits of ¥80.0 billion and a debt-equity ratio of 0.9 were achieved in fiscal 2019, a year earlier than planned. In July 2019, a certain rating agency's rating of Tokuyama rose to A again.

In this situation, we plan to repair manufacturing equipment and make investments to save energy, which we had not yet been able to do, in fiscal 2020 so as not to carry over investments in repairs to the next medium-term management plan. We will keep the shareholders' equity ratio at around 50% and will invest actively, considering economic conditions and cash flows.

## Toward Realizing Our 2025 Vision

We are drawing up the next medium-term management plan for the five years beginning from fiscal 2021. Our vision for fiscal 2025 is to be a global leader in advanced materials, and a leader in Japan in its traditional businesses. To achieve this vision, we intend to continue executing our strategy, focusing on ICT and healthcare, and will develop the environment and energy business as a new core business.

In the thermal management materials business, a demonstration test will be started for the mass production of silicon nitride for power semiconductor modules at the Center for Commercialization of Advanced Technology (Yanai City, Yamaguchi Prefecture) in April 2021 to promote quick commercialization. Meanwhile, boron nitride and aluminum nitride fillers, which are being developed, will be launched to expand the thermal management material product lineup.

In the IC chemicals business, we are enhancing the high purification of high-purity chemicals for electronics manufacturing, quality and process management and analysis techniques to meet leading-edge semiconductor manufacturers' quality requirements. We aim to



Base in Taiwan for high-purity chemicals for electronics manufacturing (Yunlin Factory of Taiwan Tokuyama Corporation)

accelerate globalization, particularly in our operations in Asia and promote the supply of locally produced goods.

In the electronic materials business, we will focus on investing to improve the quality of semiconductor-grade polycrystalline silicon and will continue to pursue differentiation from competitors' products in terms of quality.

In the pharmaceutical ingredients / intermediates business, we will strive to expand from the field of pharmaceuticals into peripheral fields. Our targets are active ingredients for supplements, cosmetic ingredients and ingredients on the periphery of veterinary medicine, for which we intend to enhance production, development and marketing. Themes regarding applications for the Company's unique technologies and existing products are being pursued. We will strive for quick commercialization through open innovation with universities and outside research institutions and by other means.

In the plastic lens-related materials business, we will take steps to expand our market share in photochromic dye materials and continue to develop high-performance photochromic dye materials to contribute to improving the quality of our customers' products.

In the dental materials and equipment business, we will continue to focus on increasing market share by developing and expanding sales of the OMNICHROMA series of composite resins, our mainstay product. We will accelerate the development of materials for crown restorations using digital technology as well as dental and preventive dental care products, which are products in next-generation businesses that we plan to make into major businesses following the composite resin business.

We also aim for business creation in the field of the environment and energy to help achieve a sustainable society. In the Chemicals Business Division, we will pursue commercialization through the development of

technology applying soda ash manufacturing technology to utilize CO<sub>2</sub>, and the development of alkaline water electrolyzer units and systems to manufacture and sell green hydrogen and contribute to promoting renewable energy.

In the Cement Business Division, the complete recycling of waste gypsum board has been acclaimed as a recycling technology that does not depend on kilns (rotary kiln). We intend to seek new business development, following that recycling technology, which will contribute to recycling and environmental protection.

## Direction of the Company in the Medium to Long Term

We believe that we cannot survive amid the international trend toward decarbonization and building a sustainable society if we do not position our businesses for the long-term, looking toward 2030 and 2050, where the environment, energy and health are key words, and for which we need to reconsider what our businesses should be from the longer-term perspective.

We will continue to work toward globalization in the chemicals and cement businesses, the businesses that have traditionally been strong sources of revenue, following the trend toward decarbonization and leveraging the technological capabilities that we have accumulated over many years. We will change the structures of these businesses to transform them into businesses that contribute internationally. However, the domestic markets that these businesses target will shrink. We cannot survive unless we take steps to evolve, such as the creation of businesses that contribute to environmental protection. To maintain our existing businesses, we will create new environmental businesses promptly.



## Top Message

In the Specialty Products business and the Life & Amenity business, we are considering new technologies and new business areas to expand sales as well as new products and businesses deriving from existing products. To develop these new businesses, we need to make our strengths clear, enhance them and make the most of limited management resources. We also need to actively procure the resources necessary from outside the Company. Instead of doing everything within the Company, we will pursue every possibility, bringing in new viewpoints and ideas through alliances with other companies, mergers and acquisitions and cooperation with academia.

Open innovation is the key to creating new businesses outside the framework of our existing businesses to reform our business structure over the long-term. We have been increasing pipelines and themes for new development by strengthening cooperation with universities and research institutions. We strongly believe that great possibilities can be realized and a wealth of knowledge can be gained through cooperation with academia in open innovation, enabling us to make ingenious use of this knowledge.

For example, we have recently developed a new chemical synthesis process jointly with a university in the healthcare field. The process enables the manufacture of high-quality active ingredients for supplements and pharmaceutical ingredients at very low cost. The process can be applied also to newly discovered drugs that are already being sold.

We are also giving financial support to universities and research institutions to support basic research and help develop new technologies. Through initiatives like these, we have connected with many university teachers. Our network has been strengthened, and we have



hired mid-career employees. A virtuous cycle has been created, which has produced results.

We primarily have connections with domestic universities and research institutions. We are considering building relationships with overseas organizations to learn about a wider range of cutting-edge technologies and improve the quality and speed of research and development. We will work toward the globalization of our businesses and marketing to demonstrate our strengths. From 2019, we have been conducting joint development with the Industrial Technology Research Institute of Taiwan (ITRI) through the Taiwan Research Laboratory established in 2018. There are many cutting-edge electronics companies in Taiwan, and our technologies have been matched with some of them.



A research and development base focusing on healthcare (Tsukuba Research Laboratory)

## Tokuyama's ESG Management

To promote our CSR activities as a management priority, we have determined nine material challenges\* related to the SDGs. Reconsidering coal-fired power plants, a source of our competitiveness, is a major theme in relation to the global environment. We believe we need to set specific targets related to our direction in the medium- to long-term, reduce CO<sub>2</sub> emissions and change to alternative energy sources. (\*See page 30 for details.)

While we disclose risks and deal with them appropriately, we take steps to create new business opportunities. The key point is changing the business portfolio, taking new environmental businesses into consideration, including enhancing the world's most advanced electrolyzer development technology, making the development technology a business and creating a hydrogen business.



We believe that we need to respect the diversity of knowledge and hire more people with more diverse knowledge, without discrimination, while being inclusive of women and foreign nationals, thereby creating an environment that enables each person to actively participate.

We believe we need to obtain diversity in our corporate governance by actions such as appointing female external directors and foreign external directors associated with our globalization.

## Looking to the Post-COVID World

COVID-19 has changed the ways in which we work significantly. It has become clear that telework is an effective means of conducting office work and data analysis, among other types of work, and is expected to improve productivity. We believe that striking a balance between working at home and working at the office improves operational efficiency and we are revising the work-at-home system.

We will actively promote digitization, preparing information tools and systems to facilitate operations



both at home and at the office.

We expect that COVID-19 will significantly change trends in our divisions and the way cooperation occurs around the world. This has a very significant impact on the Company's global strategy.

Japanese companies have followed the business practices of Europe and the United States. In recent years, we have expanded business in Asia. However, it is questionable whether we have really faced squarely and accepted the cultures in Asia. If Japanese companies really wish to promote globalization, it is important for us to do so, considering the growth potential of their markets and large populations.

The balance of power in the world, particularly between the United States and China, is changing significantly due to COVID-19. I strongly feel that the Company needs to reconsider its approach to globalization.

## Message to Investors

Considering that it is important for society and the Company to develop over the medium to long term, Tokuyama has been developing technologies and human resources, and based on these, has been expanding businesses for the future.

Our policy is to maximize profits, return profits to stakeholders, make appropriate investments and make adequate payments to employees from a medium- to long-term perspective.

To survive in today's very uncertain environment, we have to make adequate business plans to meet the requirements and expectations of society, invest and make sure that we produce results. In this way, we have to be indispensable to society.

I will listen to the voices of stakeholders and would like to go forward together and share the results. Your continued guidance and support are sincerely appreciated.