

DKS REPORT

DKS Co. Ltd.

Advantages and Strengths of DKS Businesses

DKS Group products are used across a broad spectrum of industrial fields, which allows the Company to quickly catch on to the trends of the times and the needs of customers, as well as to deliver rapid solutions to problems. Utilizing the range of expertise accumulated since its founding and its diverse lineup of product groups, the Company's strengths go beyond simply providing materials. Instead, the Company's strengths also lie in its technological capabilities, which allow it to customize the function and performance of products in line with customer requirements and to make proposals based on the ideal product combination.

Chemistry provides a solution.

DKS Credo

Contributing to the nation and society through industry

DKS Mottoes

Quality First, Cost Reduction, R&D Efforts

DKS Group Logo



The DKS Group logo symbolizes "Act for a Leap," our step for globalization. It describes the bridge for growth toward "Challenge to 1000."

Solutions to Society's



Environmental conservation and climate change response



Realization of safe, secure lifestyles



Realization of an abundant, convenient society



Our "solutions"

DKS's Six Segments

Surfactants

We provide highly functional surfactants since our foundation in 1909.

Amenity Materials

We provide materials and application technologies to add comfort in daily living environments.

Polyurethane Materials

We provide industrial materials and polyurethane materials (paints, adhesives, civil engineering and construction materials and electric insulation materials).

Functional Materials

We provide flame retardants, radcure resins, waterborne polyurethanes, etc., for applications essential to home appliances and daily life.

Electronic Device Materials

We provide ceramic materials, conductive pastes, etc., for applications in home appliances and electronic components.

Life Sciences

We provide technologies for extraction, concentration and powdering of naturally derived health foods and natural products.

DKS Report 2020 Editorial Policy

In 2016, the DKS Group began to publish its annual report (DKS Report), which added information about the Company's finances and management strategy to what had been in its Environmental and Social Report. From 2017, we referred to the International Integrated Reporting Framework promoted by the International Integrated Reporting Council (IIRC).

- We are continuously publishing an English-language edition. As our business activities become increasingly international in nature, we aim to communicate to all our stakeholders including those outside Japan. Starting with the disclosure of environmental, social and governance (ESG), and nonfinancial information associated with DKS's sustainable growth, we will also convey management's vision, business results, growth strategy, capital policy and other information.
- In this Report, by visualizing those "invisible assets" that raise corporate value, we attempt to describe the Company's current conditions and its journey to the future, so as to be able to inform the readers of the creation of value across the short, medium and long terms. Looking to the future, we will use the DKS Report as a communication tool with all our stakeholders.
- Please refer to our official website for detailed information about the financial and nonfinancial information of the DKS Group.

Organizations Covered by this Report

DKS Co. Ltd. ("DKS" or "the Company") and Group companies (collectively "the DKS Group")

Period Covered by this Report

In principle, this Report contains our activities and data during fiscal 2019 (from April 1, 2019, to March 31, 2020). The data on the Industrial Accident Severity Rate (ASR) and the Industrial Accident Frequency Rate (AFR) were obtained from January to December 2019.

Reference Guidelines

International Integrated Reporting Framework by the International Integrated Reporting Council (IIRC), "Environmental Reporting Guideline 2012" by the Ministry of the Environment, "Environmental Accounting Guideline 2005" by the Ministry of the Environment, "Environmental Accounting Guideline for Chemical Industries (November 2003)" by the Japan Chemical Industry Association (JCIA)

Posted on the Website

The Emission of Notification Substances under the PRTR Law in fiscal 2019 Transition of the Environmental Impact at Branches and Yokkaichi Chemical Safety Securement and Disaster Prevention



[Forward-Looking Statements] Statements contained in this report regarding the plans, projections and strategies of DKS that are not historical fact constitute forward-looking statements about future financial results and are subject to risks and uncertainties. As such, actual results might differ significantly from these forward-looking statements due to changes in various external environmental factors. Consequently, DKS hopes for your understanding as it does not guarantee the certainty of such forward-looking statements.

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Philosophy in Practice—The History of DKS Business Development



1900s

Japanese exports

Rapid Growth of the Spinning Industry

1915 Gembu Marseille Soap (industrial soap for textile)

With the advent of World War I, the spinning industry

undergoes dramatic growth. Textile goods exceed 50% of

1909 SILKREELER cocoon unwinding agent (chemical agents for spinning)

1930s-1950s

Industrial Modernization, Shift to Synthetics

Following World War I, the industry undergoes a period of modernization, during which time the textile industry sees an accelerating shift from natural fibers to synthetic alternatives.

1934 MONOGEN higher alcohol-based detergent 1950 CELLOGEN synthetic thickener



1909–1950s

Founded as an Oil Agent Manufacturer, Aimed to Become a Comprehensive Chemical Industry Manufacturer

Founded in 1909 based on the "Dai-ichi Kogyo Spirit," the Company developed and sold the silkworm cocoon unwinding agent, a chemical for spinning waste cocoons. The Company responded to textile industry needs by developing and selling a number of textile oil agents using sulfation and compounding technologies.

In 1915, the Company introduced the first domestically produced soap, Gembu Marseille Soap, into the textile industrial soap market, which had been completely dependent on imported soap. The Company strengthened efforts to expand into household products such as shampoo and laundry and bath soap, which provided a breakthrough contribution to business performance during wartime and postwar turmoil.

With the development of the textile industry, the Company established a position as a textile oil agent manufacturer. During this period, the Company developed the nonionic surfactant NOIGEN, the cationic surfactant CATIOGEN and various progenitors for other surfactants, setting the stage for its rise to the top of the industry.

Dai-ichi Kogyo Spirit and DKS Mottoes

The Dai-ichi Kogyo Spirit states that "We must demonstrate the traditional spirit of the Japanese people—the Yamato spirit—in our industry, always realize coexistence and co-prosperity between ourselves and others based on the concept of service, and maintain sincerity to contribute to the prosperity of the nation, society and mankind." Sincere efforts to manifest this spirit continue to be passed down through our three Company Mottoes: "Quality First," "Cost Reduction" and "R&D Efforts."

1960s

Establishing a Foundation for Future Growth

In the 1960s, against the backdrop of intensifying price competition in industrial fields, the Company expanded the scope of and diversified its industrial products. In anticipation of the future potential of the polyurethane market—positioned as a downstream sector within the petrochemical industry—the Company commenced its polyether business. Moreover, the Company launched one business after another that would serve as a foundation for the future, including flame retardants and sucrose fatty acid esters.

1980s-1990s

Becoming a Leading Highly Functional Chemical Products Company In the transition to high-value-added products, the Company enhanced research and development in the priority areas of "Resources and Energy," "Electronics and IT," "Food, Pharmaceuticals and Cosmetics" and new materials. The Company developed various highly functional surfactants and

Source of Original Technologies

During the post-World War I recession, the Company constructed laboratories in 1918, research incentives were stipulated in 1919 and "inventor award provisions" were enacted one after another in 1920 to encourage the creation of new products. The Company created superior new products and patents and strove to conduct research. In 2002, the Company implemented a patent incentive system ahead of other companies, contributing to the development and creation of new businesses such as the current life sciences business.



Growing Environmental and Safety Concerns Lead to High-Value-Added Materials

Following the oil shocks of the 1970s, the industry transitions to high-value-added products. In the 1990s, greater interest is placed on environmental consideration and safety, which accelerates the greater functionalization of existing materials

- 1969 PYROGUARD flame retardant for plastics
- 1970
- DK ESTER food emulsifier NEW FRONTIER UV/EB-curable monomers and oligomers 1981
- 1982
- 1990 EIMFLEX polyurethane 1992

Highly Functional Chemicals Sector Developments Resolve Social Issues

Japan's chemical industry begins to see the development of highly functional sectors that aggressively create and deliver added value to society.

005	ELEXCEL IL ionic liquid
013	RHEOCRYSTA cellulose nanofibers
018	I. Japonica-Bombyx Fungus dietary suppl

n citrus sudachi peel extract

polyurethane products. In aiming to become a leader in highly functional chemicals, the Company began collaborating with other industries as a way of addressing new needs. Moreover, the Company developed nonionic surfactants with a low environmental impact in collaboration with an overseas manufacturer.

2000s

Qualitative Change and Second Renaissance

Since 2004, the Company has constructed a business portfolio for a highly profitable structure and promoted the development and expansion of new businesses with high added value. With electronic and IT materials as the next generation of business pillars, the Company began to take steps to transition from a traditional surfactant company to a leading industrial chemical supplier. In 2009, the 100th anniversary of our founding, the Company started a six-year management plan with the aim of qualitative change and promoted the transition to a business division system.

A Corporate Culture of Respect for Quality

As early as 1922, uniform product standards were developed and the division of duties clearly stated that research staff were responsible for quality checks. In 1951, a quality management committee was established to cultivate a corporate culture of respect for quality and engage in organizational development. In the 1960s, QC circles were actively developed at plants across Japan led by young engineers, and in 1974, these activities were unified, and together with research efforts DKS established a reputation as a technology company.

management infrastructure development and non-petrochemicals, thereby strengthening our financial position.

In 2015, the Company formulated a five-year plan for new value creation, and in the same year, the new Kasumi Plant was constructed in Yokkaichi, Mie Prefecture, as a mother factory with the aim of integrating production, sales and development functions, preparing the foundation for a second renaissance.

Life Sciences Business Launched, Full-Scale Shift to DREAM Businesses

With its full-scale entry into the life sciences business in 2018, the Company acquired Biococoon Laboratories, Inc. and Ikeda Yakusou Co., Ltd. as wholly owned subsidiaries. As an initiative that links achieving healthy longevity and revitalizing communities, the life sciences business has, along with the environment/energy and IT/electronics fields, become part of the foundation on which the Company is focused for creating a better future.

At the Kasumi Plant, under the Uni-Top strategy (providing unique products that do not pursue scale), the Company has promoted efforts with "business partners who provide a mutual spark," whom we call inspiring/inspired partners. As the profitability of special nonionic surfactants and radcure resin materials is on the rise, they are expected to be growth drivers for achieving our numerical targets in fiscal 2024.

Value Creation Process of the DKS Group

Based on its technologies and trust accumulated over the past 111 years, the DKS Group applies originality and imagination to limited resources to deliver materials that enrich our way of life.





Message from the CEO

Stronger Commitment to Our 2030 Goals

Chairman CEO Sakamoto talks about DKS's pathway to victory.

Chairman CEO SAKAMOTO Takashi

Review of the REACT1000 plan, which carried us forward from the Heisei era to the Reiwa era

Fiscal 2019, the final year of our previous five-year plan, marked the transition from the Heisei era to the Reiwa era. The name of the new era was announced on April 1, 2019, and the new emperor was crowned on May 1. The Japan Industrial Safety and Health Association (JISHA) held its annual National Occupational Safety and Health Convention for the 78th time, but for the first time in Kyoto, in October 2019, the first year of the new Reiwa era. I served as local chairperson for this highly successful event. Later, I was invited to a tea ceremony at the Emperor's Kyoto Imperial Palace. There, DKS was named as a Certified Health and Productivity Management Organization (White 500) for the third successive year. We were also selected as an outstanding health and productivity management company by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE). It was a wonderful year that can be highlighted in our Company's history. During the three-year period following the launch of REACT1000 in 2015, we consistently achieved record-high figures for operating income. This was due to a better-than-expected contribution from our 5G business related to the next-generation communication standard. During that period, we built a new plant for the 5G business. I thought that if we could continue with this momentum, we would achieve our planned targets. However, prices of naphtha and other commodities surged. Although demand for 5G materials continued to increase, it exceeded our production capacity. Our emergency response measures entailed outsourcing costs that were much higher than expected, putting pressure on profits. We strove to reflect the higher raw materials costs in our selling prices, but that proved difficult.

With regret, therefore, we missed our performance targets for the final year of the plan. As a qualitative target, however, we formulated a slogan to ensure stable growth and survival. The slogan, which encapsulates the Company's 100-year history, is "Chemistry provides a solution: From Kyoto to the world into the future." We celebrated our 100th anniversary on April 1, 2009, the first spring after the Global Financial Crisis (GFC) that started in September 2008. The word "REACT" in our mediumterm plan underscores the core priorities we have set to connect our four stakeholder groups. We have

selected 20 priorities in total, based on the five letters in "REACT" multiplied by our four stakeholder groups: employees, shareholders, customers and society. For example, "R" refers to "Return" and indicates our commitment to providing returns to each group of stakeholders. We also decided to categorize our businesses according to a time axis, which had not been done before. Specifically, businesses that existed on March 31, 2015, when we launched the plan, are called ACTUAL businesses. These are businesses that underpin our Company. Using them as a base, we are developing peripheral businesses, which we call NEXT businesses. And new businesses involving new initiatives are called DREAM businesses. This was our blueprint for the future. And we were able to reach or make good progress with all the qualitative targets incorporated in our REACT matrix.

REACT Matrix (priority qualitative targets)

Four stakeholders	Employees	Shareholders	Customers	Society
R (RETURN)	Give proper credit for their contributions	P/E and P/B for 1000	Active partner	Positive economic cycle
E (EXPORT)	Increase the overseas ratio	Annual report	Market development	Mother plant
A (ADVANCE)	ACTUAL100×6	Withdraw from unprofitable businesses	DREAM100×6	Brands
C (CREATE)	NEXT100×6	Change from undervalued stock to growth stock	Diplomacy with special assignments	Regional revitalization
T (TRAIN)	Training & education	Outside officers	Increase IT sales	Public classes

We started talking about making Integrated Reports around 2014 when we were formulating REACT1000. Prior to the GFC in 2008, we cited enhancement of corporate value in management plans as a way to improve our business foundation. This means practicing management with a focus on value creation processes or a strategic road map for realizing value. The aforementioned REACT matrix was included in our first Integrated Report, covering the year ended March 2016. The SDGs advocated by the United Nations in 2015 and ESG targets are mirrored in the spirit of the DKS Credo, the DKS Mottoes and the Company song, and we work constantly to achieve them. We used the matrix to monitor the progress of our qualitative goals, with reference to the Octopus Model of the International Integrated Reporting Council (IIRC). Our matrix shows a set of mottoes that focus on qualitative (nonfinancial) goals. We believe that these qualitative goals are reflected in our balance sheets, which represent the culmination of our historical financial performance. Three items from our previous five-year plan deserve special mention. First, our work in radcure resins, one of our NEXT businesses, subsequently evolved into a new high-profit core business. Second, two companies active in new fields joined the DKS Group and launched our new life sciences business. Third, our total market capitalization, an indicator of corporate value, rose from the ¥10 billion range to the ¥50 billion range. Our corporate structure has truly changed in the past five years.

Influence of COVID-19 on corporate value: Using the Octopus Model to raise value in the CtoB era

The new coronavirus that causes COVID-19 was named because it resembles the shape of a flame around the sun. It is derived from the Spanish word for "crown." The spread of COVID-19 has caused a breakdown of value chains all over the world. There are also reports that we face an economic crisis comparable to the Great Depression that started in 1929. The GFC recession resulted from financial problems that originated with subprime loans. The coronavirus crisis is a crisis arising from the shutdown of the economy itself and so is completely different from the GFC. The economy after the Industrial Revolution—characterized by correlation between supply and demand and between goods and money—has changed in the 21st century. Advancements in computers, invented by humans in the 20th century,

have changed the meaning of value itself. That is the result of digitalization. And it seems that digital has gained an advantage over manufacturing, the world of analog. However, COVID-19 has shut down economic activity, prompting humans to think again that the source of value might be analog after all. "Analog" in Spanish is "análogo." Breaking this down, we see that "aná" means "anti" and "logo" means "logical." Therefore, "análogo" means "illogical." I think chemistry is more of an art rather than a science and thus refers to analog manufacturing.

Human-made manufacturing that is not logical (digital) is non-quantifiable (analog). Until the 20th century, things were measured using analog values, but this has changed due to digitalization. Traditional marketing used to focus on BtoB and BtoC. From now on, it will shift to CtoB. Let us cite the example of Company A and Company X, both based in China. Among China's population of 1.2 billion, Company A has a network of 700 million consumer members. Company X, a manufacturer, announces development of a new cosmetic product. Company A's 700 million members see the announcement and respond positively, providing Company X with the confidence to proceed to construction of a new factory. In other words, this is not BtoB or BtoC, but rather a flow in which C influences B. It is an example of value created by digitalization. The consumer (C), who is purchase-driven, can preempt and influence the actions of the business (B), in this case a prominent company. At our Company, we use the term "inspiring/inspired partners" for business partners who spark off each other. They are partners who appreciate analog and enhance it into digital form. We recognize the value drivers who create value in the Octopus Model. They represent DKS's three strengths and five important issues (business foundation). We must be aware of capital cost and capital efficiency indicators (such as ROIC, ROE and PBR) and reflect these in our balance sheets over time, because they affect our stock price. Our Uni-Top strategy, which focuses on uniqueness rather than scale, incorporates intangible factors that do not have physical form. I firmly believe this is the ideal strategy to increase the value of DKS.



Octopus Model showing the value creation process

(Source: "International Integrated Reporting Framework," International Integrated Reporting Council (IIRC))

Bridging the dream of creation: "Cocoon Spanning Michinoku and Kyoto"

Reiwa, the name of Japan's new era, is derived from a piece of Japanese poetry originally read at a banquet in Dazaifu, Kyushu, and recorded in the *Manyoshu*, a collection of ancient Japanese poems. The *Manyoshu* features works by many poets about their journeys between the Kyushu and Tohoku regions. Through a connection with our subsidiary, Biococoon Laboratories, which is based in Iwate Prefecture in the Tohoku

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region, I was invited to give a 90-minute lecture at the Iwate Association of Corporate Executives in July of this year. As I was speaking about the Michinoku region (ancient name of the Tohoku region), I was reminded about a famous military commander of the early Heian period, named Sakanoue no Tamuramaro. He was a warrior who features in a Kyoto dance. On the orders of Emperor Kanmu, he led tens of thousands of soldiers to deal with an uprising in Michinoku. The local enemy general who fought bravely without help was Aterui. Tamuramaro won the battle and was preparing to return to Kyoto. He asked the emperor to save the life of the enemy general who fought bravely. However, the aristocrats opposed this and Aterui was executed. The principle of majority rule alone is no measure for true value. It is said that Tamuramaro, together with a Michinoku woman who loved him, prepared the burial mound of Aterui and prayed for his soul. When I stood in front of the burial mound,



which remains in Kiyomizudera in Kyoto, I considered the relationships and values of our northern warriors. I thought of Gembu, a god who protects Kyoto from the north. (Gembu is also the name of a DKS Group company.) I make sure to visit his shrine every New Year. With these things in mind, I decided on the title of my speech: "Cocoon Spanning Michinoku and Kyoto."

Our Company was founded on a surfactant for unraveling and washing silkworm cocoons, the raw material for silk fabrics. Meanwhile, Iwate-based Biococoon Laboratories has discovered a substance from silkworm cocoons that might enhance people's immune systems. Anyway, for 90 minutes I gave my address, emphasizing the fact that "cocoons" are common to both our companies: DKS in Kyoto and Biococoon in Iwate. In effect, my speech was about achieving regional revitalization through a union between Kyoto and Iwate prefectures. About an hour into my speech, I put on the happi coat to help the audience wake up. Our new management plan is called FELIZ 115; "feliz" means "happy" in Spanish. After being applauded for my happi coat, I gave an outline of our new medium-term plan. "Octopus" is a Latin word meaning "eight-legged." Moomin, a character loved all over the world, was born in August, the eighth month of a year, which is my birth month. I love Moomin and wore a tie with Moomin designs for my address. Finland, where Moomin was born, was ranked the world's happiest country for the second consecutive year. The heart of the our new plan is to practice happiness management. And the foundation of our business model for the new Reiwa era, translated as Beautiful Harmony, is happiness. In my address, I introduced examples of our management since 2015, based on the Octopus Model and value creation processes.

When we were formulating our new plan, Nokia, a leading company from the world's happiest country, came to mind. I see Nokia's spectacular revival after overcoming the financial crisis as a successful case of happiness management for the Finnish people. We have made major investments in 5G next-generation communications ahead of others in the world. The most important thing for our four groups of stakeholders is happiness. The letters of FELIZ stand for Future, Environment, Life, Innovation and Z-FLAG (as meant by challenge). We created a new matrix for happiness management using FELIZ as an acronym. We thought about how we could create corporate value that the market evaluates highly. Chemistry is exactly the analog value that humans produce. Let us review analog value once again. As a materials manufacturer, we created a business model that will celebrate its 115th anniversary in 2025. Due to the COVID-19 pandemic, we are facing our worst postwar economic crisis, and uncertainty about the future continues to increase. Nevertheless, we have declared that we will not change our strategy, and we will not reduce R&D and capital investments. I am convinced that we will successfully implement FELIZ 115, our plan for 2030.

FELIZ 115: Milestone that will sculpt our future

For the year ending March 2025, we are targeting net sales of ¥85 billion and operating income of ¥10 billion. In the new plan, finalized in January 2020, we outline our strategies, tactics and concrete measures, as well as our policies and targets. COVID-19 originated in Wuhan, China, and spread throughout the world, it has been reported. With this in mind, I ordered the Company to verify the processes of our new plan.

Given the COVID-19 pandemic, is it possible to increase operating income from ¥4.1 billion in fiscal 2019 to ¥10 billion in five years? Originally, we set conservative profit targets for the first and second years of the plan, then aimed to make solid capital investments to achieve full capacity utilization from the third year to achieve the ¥10 billion target. Our product lineup is classified by material into five major categories and 39 subcategories. A look at the profit structure of our subcategories reveals an unevenness—an unevenness in contribution by segment. From an efficiency perspective, focusing on highly profitable segments allows us to achieve better numbers than those revealed in actual profit performance figures. Some loss-making segments that seem inefficient at first glance are actually hidden treasures of technological development. So we took another look. We decided to maintain our loss-making segments that represent future-oriented businesses. We reaffirmed that in the first half of the Plan, we will withdraw from some unprofitable businesses, and in the second half we will reap the benefits of profitable businesses. We will also step up our commitment to the SDGs and ESG.

In the milestone year of 2025, we are targeting a ¥25 billion increase in net sales compared with 2020. And we are targeting a further ¥50 billion increase by 2030. In that year, with net sales of ¥135.0 billion, the ACTUAL, NEXT and DREAM businesses should each account for a third of total net sales. Do we have a grasp of all the ACTUAL businesses activities of existing customers? We made a list of all existing customers and new customers under development. Among them are our inspiring/inspired partners. These are companies with which we promote top management communications actively and regularly. Our plan is to deepen our relationships with these partners and make 2030 a year of great achievements. I ordered all our R&D departments to list target initiatives of all members. This effort is aimed at forming relationships with customers and includes Japan's position in Nikkei Data's annual survey, which covers 74 products and services around the world. What kind of management policies do our partner companies have, and what kind of business should we establish with them? This work ended during the COVID-19 pandemic, opening the way to forge ahead with building inspiring/inspired partnerships. As a technology-oriented, technology-based company, we have adhered to our three Company Mottoes of "Quality First," "Cost Reduction" and "R&D Efforts" since our founding. The addition of the new life sciences business to our five operating segments (classified by type of material) for reporting purposes is a reflection of this.

Since the start of FELIZ 115, we have added life sciences as a focal segment, with the result that we now have six operating segments. Effective the first year of the new plan, we have switched from our previous method of budgeting by type of material to setting targets by customer. In addition to our ACTUAL businesses, we have now clarified the customer targets for our NEXT (peripheral) and DREAM (new) businesses. We attach great importance to the relationship between R&D—aimed at advancing the NEXT and DREAM businesses—and our customers. In our focus fields of electronics, IT, the environment, energy and life sciences, which of our tools are best suited to which customers? We now have an organizational



structure that is fully customer-oriented. The COVID-19 pandemic has prompted new executives in our sales department to engage in deep discussion about sales activities and marketing strategies. In the production department, as well, the pandemic has sparked increased debate and concrete plans to support our sales force. With 2030 in mind, our sales departments have changed their focus to short- and medium-term realities, while our R&D departments have shifted to a long-term future perspective. We now have a system in place in which our sales and R&D departments work together to maximize our overall organizational capabilities. In our "Second Renaissance" of 2015, we envisaged that our business structure in 2030 would consist of BtoB (industrial products) and CtoB (consumer products) businesses. With the help of all employees, I am confident that we will surpass the milestone targets set in the FELIZ 115 plan.

Pursuing easy-to-understand corporate value for happiness management

The important things in happiness management are the happiness of the Company and the happiness of employees. This means working with a sense of excitement. Although we do not yet have a quantitative

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evaluation system for happiness, it is significant that we met the criteria for certification as a Certified Health and Productivity Management Organization in 2020. Employees working on the front lines, whether in factories or the head office, have embarked on health management initiatives, and our female workforce has played an important role in maintaining good working conditions. I spoke about health management with Mr. Okada, head of the Health Management Research Group, a nonprofit organization. He said to me, "Mr. Sakamoto, health management is not just about talking; it's about paying money. It's the same as investing." I think he is right. I have long emphasized the importance of sharing profits with workers. Even in



front of our shareholders, I have declared that our employees come first. Dividends are important, but we place higher priority on employee satisfaction and capital investments. That was my reply to a question at our Ordinary General Meeting of Shareholders. We give priority to those who work hard, and we reward employees for their efforts. Our employees feel that the Company values their work. They are the source of our happiness. Employee happiness is an inherent part of the FELIZ slogan and the FELIZ matrix.

The global SDGs for 2030, as well as ESG initiatives, are also about pursuing happiness. Our vision for 2030 is as follows: (1) net sales of ¥135 billion and operating income of ¥18 billion; (2) a corporate image shaped by our Uni-Top strategy, which values uniqueness; and (3) ACTUAL, NEXT and DREAM businesses each accounting for one-third of net sales. The FELIZ 115 plan will play a backcasting role covering the fiveyear period leading up to 2030. During this period, we will establish KPIs and capital investment plans for 2030. We believe that happiness management is the ultimate source of value creation. In economic terms, humans are the creators of value, while machines and AI are simply tools to help humans achieve their targets. COVID-19 has dramatically changed the working environment, giving rise to working from home, teleworking and other arrangements. For chemical manufacturers, especially those who produce industrial chemicals and other materials like DKS, human resources will be the key to survival. Recruiting is important. Compared with last year, we made 50% more new-employee job offers this year, including to a student from Mongolia. We are also hiring people in their 40s, a generation who experienced the worst job hunting period when they were finishing their school. We tell everyone in-house that we have no age restrictions on employees if they are healthy, motivated and contribute to the Company. In the analog world of chemistry, it is important to embrace people who work happily.

We have now entered the second fiscal year in the new Reiwa era. As of July 28, the number of COVID-19 infections in Iwate Prefecture was zero. The last 10 minutes of my 90-minute address about Michinoku was a question-and-answer session. Three people spoke up and asked six questions. The last person said this: "I agree with your statement about the importance of evolution = innovation in relation to COVID-19. That said, what are the things that you feel must never change?" It was a great question to wrap up the session. I spent the next two-and-a-half minutes responding: "The answer lies in the treasures left by our founder, namely, the DKS Credo, the DKS Mottoes and the Company song." I bowed my head and thanked everyone and, as I descended from the stage, I thought about the symbolic presence of Tamuramaro, the great warrior from the north. In the Age of Discovery, compass needles pointed to Polaris, the North Star. In the southern hemisphere, people were guided by the Southern Cross. In Japan, the warrior in the north was Tamuramaro, and the literary man in the south was Sugawara no Michizane. Chemistry is a mixture of martial and cultural arts-like the warrior in the north and the literary man in the south. A new course on integrated reports has been established by a professor at Fukuoka University in Kyushu, I regularly discuss the value creation process with teachers of the university. The key is to recognize that the source of value lies in costs. DKS will continue creating corporate value that makes all stakeholders happy. We ask for your ongoing understanding and support.

SAKAMOTO Takashi Chairman CEO

Review of the Medium-Term Management Plans

	ADD21 (Ambitious Dynamics DKS for the 21st Century) —Tolerance to Changes	CHANGE100 Stage I —Changing the Corporate Culture	CHANGE100 Stage II —Expansion along with Earnings		
	April 2004–March 2009	April 2009–March 2012	April 2012–March 2015		
Targeted Figures	Consolidated net sales ¥50 billion Ratio of ordinary income to sales 7%	Consolidated net sales ¥55 billion or higher Ratio of ordinary income to sales 4% or higher	Consolidated net sales ¥60 billion or higher Ratio of ordinary income to sales 5% or higher		
Slogan	"With High Aspirations, We Will Shine Brightly in the 21st Century"	"Each of Us Holds the Key to Success"	"Each of Us Holds the Key to Success"		
Vision	Business Expansion and Sustainable Corporate Value Growth	Building a Business Structure Necessary as a Leading Industrial Chemical Company	Staying Ahead of the Times as a Leading Industrial Chemical Company		
Management Policies	 Putting the concept "R&D is the engine of the Company" into practice to realize customer satisfaction Continuously complementing and expanding the values of the Company Reinforcing the business by emphasizing the "three actuals" (actual work site, actual goods and actual situation) Enhancing corporate governance Promoting compliance management Establishing an ideal company structure by the 100th anniversary (April 2009) 	 Securing a stable profit structure Pursuing greater business efficiency Developing and strengthening our foundation to realize the "technology makes the Company" concept Accelerating the creation of new products Enhancing compliance management Improving managerial skills and human resource development 	 Expanding peripheral business fields Enhancing and reinvigorating domestic production facilities Accelerating the creation of new businesses Pursuing cost reductions Improving management capabilities and developing human resources Enhancing overseas expansion and strengthening administration 		
	1. Increasing sales and building a stable earnings-	Basic St	trategies		
Plan Outline	 Developing and expanding new high-value- added businesses Generating strong awareness of and benefits from realizing targets after establishing the management infrastructure 	 Enhancing the enterprise's power (marketing clout, cost-saving ability, technical strength and organizational power) = Heightening our corporate value Promoting selection and concentration = Determining the withdrawal from underperforming se based on our exit rule Optimizing the allocation of management resources = Funneling people, goods and capital Seeking more productivity = Seeking more profitability through the integrated business division approach Creating new businesses and strengthening cooperation with the parties concerned = Develop inorganic materials, dispersion technology, electronics materials, etc. Focusing on priority business segments = Promptly reaping the benefits of an existing, ongoing 			
Review	In the final year of the plan (fiscal 2009), business conditions became severe, characterized mainly by declining demand and falling sales prices amid surging raw material naphtha prices caused by high crude oil prices and the subsequent global recession triggered by the financial crisis in the United States. Against this backdrop, DKS undertook such initiatives as boosting sales of core products, developing new markets in growing fields that include IT and the environment, focusing on developing new materials, continually revising prices, and cutting operating expenses and other costs. Despite these efforts, the Company's earnings fell below the plan's targets.	The initial year saw the impact of the financial crisis triggered by the Lehman Brothers bankruptcy. With revenues growing over the next two years, however, DKS successfully achieved a target of the plan by recording final fiscal year (fiscal year ended March 2012) consolidated net sales of ¥56.2 billion. In contrast, the Company was unable to reach the plan's operating income target due to operating income decreasing in the final fiscal year amid sharp demand drops and ongoing high raw materials prices.	Although DKS aimed to increase net sales from ¥56.2 billion the previous fiscal year to ¥60 billion, the fiscal year ended March 2015, the final year of the plan, ended with consolidated net sales at ¥55.5 billion, below the target because of delays in investment to raise production in core businesses and stagnation in the solar cell field. On the other hand, DKS achieved its operating margin target given record-high operating income, ordinary income and net income. While missing its quantitative targets, DKS saw success in qualitative terms.		
Successes	Introduced an integrated business division approach that vertically links the research, production and marketing divisions, and promoted a change in consciousness toward the concept of emphasizing earnings based on strict budget management and clarifying responsibilities	 Increased business divisions' profits by instilling a profitability mind-set Launched and promoted the Human Resources Development Project aimed at instilling an awareness of management in all departments 	 Upgraded the management infrastructure (e.g., commenced introducing a new ERP system) for the future Maintained a healthy balance sheet (increased the capital adequacy ratio) Made new investments for growth (made Yokkaichi Chemical a wholly owned subsidiary) to expand business fields, purchased land, began preparation for a new plant 		
Issues	Further instillation of a profitability mind-set	 Improve the corporate culture to bring a profitability mind-set to the forefront Realize a balance in three areas: Maintain a strong balance sheet: Simultaneously increase assets and liabilities/capital Revamp the business portfolio: Select and concentrate on future-oriented businesses Optimize human resources: Develop highly capable employees that cross generational lines 	Maintain a robust and healthy balance sheet to increase earnings		

[12)

REACT1000 Summary

Plan Overview

When the plan was formulated, the stated goal was to solidify the foundation of changing the corporate culture and expanding earnings that was established in the previous plan and take on the new challenge of creating the future. Quantitative targets included consolidated net sales growth of 1.5 times to ¥75.0 billion, an operating margin of 8% and operating income of ¥6.0 billion by the plan's end. The qualitative goals involved expressing the relationship among the four stakeholders surrounding the Company through the 20-item slogan represented by the acronym REACT (Return, Export, Advance, Create and Train), with the plan subheading "Act for a Leap" indicating a break from existing conceptions to bring about change.

Review

On the quantitative side, sales were revised downward in the third year of the plan due to an extreme slump in solar cell sales, which had been expected to grow, but the operating income target was left unchanged, and in the first half of the plan reached a record high for the third consecutive year. However, after that, rising production costs for 5G materials, which far exceeded expectations, insufficient response to soaring raw material prices and COVID-19 led to operating income of ¥4.1 billion in fiscal 2019, the final year of the plan, resulting in our unfortunately falling short of the targets.

The 20 items in the matrix, which are qualitative elements, have all been started or are in progress. As a result, our view is that the foundation for creating the future has been laid according to plans. As a result, DKS was able to 1) expand business peripheral areas and efforts to create new businesses, 2) focus on business development with new capital investment and R&D expenses, 3) change the balance sheet composition and increase total assets 1.3 times compared with the end of the final year of the previous plan, 4) bring life sciences–related Biococoon Laboratories Inc. and Ikeda Yakusou Co., Ltd. into the Group and 5) lay the foundation for realizing business income and profits commensurate with total assets, including up-front investment in new businesses.

REACT1000 Manager	nent Policy and Evalu	ation	Evaluation A: Positive outcome	B: Neutral outcom

	management policy	Contents		LValuation
(1)	Create new corporate value	Maximize performance and market capitalization derived from assets held	A	Implement capital investment that contributes to sales: circuit board materials and other items Market capitalization: Maintained a high level of more than ¥4,000 per share.
(2)	Create a clear corporate image	Increase awareness of the DKS image and profile	А	IR activities, DKS reports and other communication efforts facilitated easy understanding; pursued further "ease of understanding."
(3)	Ensure more profound governance	Increase management efficiency by focusing on corporate governance	A	No increase or decrease in the 10 "explain" items in the Company's Corporate Governance Report after revision of the principles of the Corporate Governance Code.
(4)	Maintain and increase optimal ROE levels	Pay careful attention to ROE from a medium- to long-term perspective	в	Sales below budget and a decline in profitability due to investment led to the recent downward trend, and the target was not achieved.
(5)	Create advantages through collaboration	Promote the development of materials and technologies in collaboration with business partners, academia, associations and related parties	A	Joint development with universities and others such as corporate projects.
(6)	Accelerate and enhance mother plant functions	Improve Group-wide productivity based mainly on a Yokkaichi composite base structure	A	Investment focused on the No. 2, 3 and 4 factories of the Kasumi Plant. Company-wide productivity improvements are forthcoming.

REACT Matrix Evaluation



Net sales plan targets/net sales



Operating income plan targets/operating income



Overview of the New Medium-Term Management Plan "FELIZ 115"

Positioning of the New Medium-Term Management Plan "FELIZ 115"

- The five-year medium-term management plan "FELIZ 115" launched in April 2020 is based on the implementation of ongoing changes that will occur over the next 100 years, with a focus on the social environment of 2030. Despite increasing uncertainty throughout the world, we expect the economy to grow steadily, centered on the United States.
- The DKS Credo "contributing to the nation and society through industry" is eternal. We have positioned "FELIZ 115" as a new medium-term management plan that will enhance corporate value and generate consolidated net sales of ¥100 billion.

Vision for 2030

- 1. Highly profitable Uni-Top intermediary materials manufacturer
- 2. Technology developer pursuing progress and innovation
- A company balancing corporate value and stakeholder satisfaction

Targeted Corporate Image

- As a Uni-Top company, we will conduct management while sharing happiness with our four stakeholders.
- In brief, we will be evaluated for our uniqueness and will enhance corporate value with a shared sense of excitement.

Targeted Vision in 2030

Ahead of 2030, we will strengthen existing businesses and engage in the full-scale development of new businesses.

"FELIZ 115" will solidify our foundation to ensure we achieve our 2030 targets (net sales of ¥135 billion and operating income of ¥18 billion).

Previous medium-term New medium-term Next medium-term management management plan management plan plan "DKS2030" (tentative) 2020 - 2025 Period: April 2015-March 2020 Period: April 2020-March 2025 Period: April 2025–March 2030 Results Targets Theme Realization of a highly profitable Uni-Top company Net sales ¥67.0 billion ¥61.4 billion Net sales ¥85.0 billion Targets Operating income ¥6.0 billion ¥4.1 billion Operating income ¥10.0 billion Operating margin 9.0% 6.8% Operating margin 117% Net sales ¥135.0 billion (twice that of March 2020) ¥3.6 billion ¥2.0 billion Total assets ¥92.0 billion (forecast) Profit Operating income ¥18.0 billion (triple that of March 2020) ROF 6.4% Asset turnover ratio 1.0 times 10.0% Overseas sales ratio ¥12.0 billion (five-year cumulative) 20.0% 16.8% Capital expenditures R&D expenses-to-sales ratio 5.0% ROE 10.0% or higher **Priority Measures** Restructure management resources Enhance earnings power Strengthen the management foundation Revise the performance evaluation and Withdraw from noncontributing Realize early returns on advanced businesses within business investments remuneration systems; establish a system the first 1-2 fiscal years. in the Kasumi Plant and other areas. corresponding to contributions. About "FELIZ 115" F Future FELIZ This word means happiness in Spanish. DKS chose "FELIZ" because we want to provide all E Environment stakeholders with happiness. Each letter in the word FELIZ represents one of the five themes of our medium-term management plan in English.

Life

Z Z-Flag/Challenge

115

Looking ahead to the final year of this plan in 2025, this number expresses our plans for the 115th anniversary of our founding.

(DKS REPORT 2020)

2020 - 2025

Overview of "FELIZ 115"

Management Objectives

- DKS will restructure its business in the first two years of this plan to become a highly profitable Uni-Top company with 2030 consolidated net sales more than double and operating income more than triple the respective figures in fiscal 2019.
- Targeting consolidated sales of ¥85 billion and operating income of ¥10 billion in the final year of the medium-term management plan (fiscal 2024), we aim to establish a sustainable position as a Uni-Top company valued for its uniqueness. We will also promote M&A to accelerate the expansion of business domains and the development of new businesses.

	FY2019	FY2024		FY2019-FY2024	
(Billions of yen)	Results	Targets	Change	Percentage Change	CAGR
Net sales	61.4	85.0	23.5	38.3% increase	6.7%
Operating income	4.1	10.0	5.8	140.7%	19.2%
Operating margin	6.8%	11.7%	-	4.9-percentage-point increase	-
Total assets	81.7	92.0 (Plan)	10.2	12.6% increase	2.4%
Asset turnover ratio	0.8 times	1.0 times	-	0.2 times increase	-
Capital expenditures	6.1	12.0 (Five-year cumulative total)	5.8	95.5%	14.4%
R&D expenses-to-sales ratio	4.5%	5.0%	-	0.5-percentage-point increase	-
ROE	6.4%	10.0% or higher	_	3.6-percentage-point increase	-

to meet the expectations of the four

to enhance corporate value.

stakeholders surrounding the Company and

Basic Approach



FELIZ Matrix: Meeting the Expectations of Our Four Stakeholders

and developing and cultivating DREAM

businesses.

	Employees	Shareholders	Customers	Society
F Future	Create on your own	$PBR = ROE \times PER$	Reciprocal partner	Humans or Al
E Environment	Distribute according to contribution	ESG-based management	CtoB logistics	Survival of the fittest
L Life	Health first	Long-lived brand	Healthcare	100 years of life
Innovation	Lightning speed	Market capitalization above ¥50 billion	New sales models	5G life
Z Z-Flag/Challenge	Behavioral changes	All-time highest profit	Development-oriented	Era of happiness

Overview of the New Medium-Term Management Plan "FELIZ 115"

Action Strategy

1	2	3
Establish ESG-based management targets in line with five of the SDGs (3, 7, 9, 12, 17); maintain our position as a top industrial chemical company.	Increase profits in the electronics, information, environment and energy fields; focus management resources on business development in the life sciences field.	Transform the marketing strategy significantly to increase the commercialization rate and shorten development periods.

SDGs/ESG-Based Management Objectives

SDGs (Sus	tainable Development Goals)			ESG (Environment, Social, Governance)	
3 GOOD HEALTH AND WELL-BEING	Life sciences business net sales X10.0 billion	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Cooperate with local government strategic special zones Proactively develop naturally	Promote the active participation of women Appoint female executives	
7 AFFORDABLE AND CLEAN ENERGY	Solar cell, exhaust gas	17 PARTNERSHIPS FOR THE GOALS	derived raw materials	Create employment	
کې:	business net sales ¥10.0 billion	*	inspired partners	Employ foreigners and people from other industries	Environment Social Governance
9 INDUSTRY, DINOVATION AND INFRASTRUCTURE	5G business not sales			Number of outside directors	
	¥10.0 billion	SUSTAIN DEVELOP	ABLE G ALS	One-third or more of all directors	Guidance for Collaborative Value Creation

Focus the allocation of management resources in the electronics, information, environment and energy and life sciences fields

	Focus areas						
	Electronics and information	Environment and energy	Life sciences				
Surfactants	Special surfactants • Early return on the Kasumi Plant investment • Business expansion through equipment operation						
Amenity Materials			Cellulose nanofibers (CNFs) • Business expansion through equipment operation				
Polyurethane Materials	Functional polyurethane products Early return on the Kasumi Plant investment Business expansion through equipment operation 	Synthetic lubricants Stable profits through integrated equipment 					
Functional Materials	Radiation-curable resin materials • Early return on the Kasumi Plant investment • Business expansion through equipment operation						
Electronic Device Materials		Battery materialsKyoto Elex					
Life Sciences			Functional materials Promote the development of functional foods 				

Where Have We Come From, Where Are We Going?

How Should We Manage?

How Can We Be Sustainable?

Priority Measures Road Map

1	2	3
Withdraw from noncontributing businesses within the first 1–2 fiscal years.	Realize early returns on advanced business investments in the Kasumi Plant and other areas.	Revise performance evaluation and remuneration systems; establish system rewarding contributions.
(Restructure management resources)	(Enhance earnings power)	(Strengthen the management foundation)

Seven Projects for Realizing "FELIZ 115" Restructure management resources

• Project for increasing contributions from

• Project for withdrawing from

noncontributing products

older plants

Enhance earnings power

- Project for creating proactive business models centered on solutions businesses
- Project for shortening the product development period by concentrating product development
- Project for creating profitable patterns and eliminating hidden losses

Strengthen the management foundation

- Project for eliminating work that does not contribute to customers or DKS (work-style reform)
- Project for strengthening appropriate resource management and revising evaluation systems

Business Restructuring Time Line		В	usiness Expansion Time Li	ne
April 1, 2020 Apri	2021 April	2022 April	2023 April	I 2024 March 31, 2025
Withdraw from noncontrib	uting businesses			1
2 Realize returns on advance	ed business investments in the Ka	sumi Plant and other areas		
3 Accelerate alliances with	partner companies and achieve rap	pid commercialization at the Kasun	ni Plant and in the life sciences bu	Isinesses
4 Reorganize the corporate	structure with an emphasis on cus	tomer orientation; shift to Compan	y-wide organizational sales activit	ties
5 Revise performance evalu	ation and remuneration systems to	o a system that evaluates contribut	ions	
6 Establish SDGs/ESG-base	d management objectives; contribu	ute to society through business act	ivities; aim to enhance corporate	value
Continue employee happi	ness-based management; conduct	activities to maintain the "Health a	and Productivity Brand"; create co	mfortable working environments

Risks and countermeasures in planning

1	Soaring raw material prices due to changes in geopolitical dynamics and other areas	Focus efforts on passing on increases to selling prices
2	Rising interest rates	Completed funding procurement at fixed interest rates
3	Economic depression due to COVID-19	Strengthen cash conversion cycle management
4	Intensifying price competition in the 5G market	Early return on invested capital and cost reductions
5	Postponed development of NEXT/DREAM upcoming new businesses	Strengthen the R&D structure

Financial/Capital Strategies and Total Shareholder Return

Financial Position

As of the end of the fiscal year ended March 31, 2020, the Company had total assets of ¥81.7 billion (up 7.7% year on year), net assets of ¥34.2 billion (up 2.0% year on year), an equity ratio of 38.8% (down 2.5 percentage points year on year) and interestbearing debt of ¥29.9 billion (up 27.6% year on year); the net D/E ratio increased from 0.48 in the previous fiscal year to 0.57. Cash flows provided by operating activities increased 16.4% compared with the previous fiscal year to ¥3.7 billion, capital investments increased to ¥6.1 billion from ¥5.8 billion the previous fiscal year and cash flows used in investing activities reached ¥5.8 billion. Free cash flows were negative at minus ¥2.0 billion. Net cash provided by financing activities totaled ¥4.9 billion, including ¥1.0 billion used in dividend payments (due to interim dividends with a record date of September 30, 2019) and ¥5.8 billion provided by the issuance of corporate bonds.

Financial Analysis of the Past 10 Years

The performance and financial results of the DKS Group for the period from April 2009 to March 2020 are analyzed as follows. (Cumulative totals are the totals over the 10-year period from April 2010.)

	April 2009–March 2010	April 2019–March 2020	Assessment/Comments
Net Sales	¥44.3 billion	¥61.4 billion	Increased 38.6% in 10 years
Operating Income	¥1.57 billion	¥4.15 billion	Down 4.3% YoY, failing to reach the five-year target
Operating Margin	3.6%	6.8%	Failed to reach the medium-term management plan target (9.0%)
Profit Attributable to Owners of Parent	¥0.5 billion	¥2.01 billion	Profits declined for the second consecutive fiscal year
ROE	3.6%	6.4%	Failed to reach the target (10%), declined 2.0 percentage points YoY
Total Assets	¥44.2 billion	¥81.7 billion	Increased 84.5%
Net Assets	¥15.3 billion	¥34.2 billion	Increased approximately 2.2 times due to internal reserves and two capital increases
Interest-Bearing Debt	¥14.4 billion	¥29.9 billion	Increased ¥15.4 billion due to aggressive capital investment
Net D/E Ratio	0.75	0.57	Significantly improved due to an increase in net assets

	Total for 10 years from April 2010	Assessment/Comments		
Profit Attributable to Owners of Parent Cumulative Total	¥18.3 billion	Recorded total profits of ¥12.6 billion over the past five years		
Capital Investment Cumulative Total	¥40.0 billion	Invested aggressively for growth since the fiscal year		
Depreciation Cost Cumulative Total	¥24.2 billion	than the amount of depreciation		
R&D Expenses Cumulative Total	¥26.0 billion	Continued investment in technology		
FCF Cumulative Total	¥(1.2) billion	FCF over the past 10 years decreased slightly		
Dividend Cumulative Total	¥5.1 billion	The dividend per share increased to ¥70 from ¥25 a decade ago (after considering stock splits)		
Capital Increase	¥4.4 billion	Implemented public offerings on two occasions (March 2011 and December 2014)		
Share Buybacks	¥1.0 billion	Determined as a shareholder return policy in January 2017		

Total Shareholder Return for the Past 10 Years

Total shareholder return (TSR) by dividend and stock price was as follows. Over the past year, the stock price recovered from stock price adjustments in the previous fiscal year. The medium- to long-term TSR over the past three years was 22.9%, whereas the annual TSR rate was 13.9% over the past five years and 12.3% over the past 10 years, exceeding the TOPIX and TOPIX Chemicals dividend index returns. These levels exceed the shareholder capital cost anticipated by the Company.

Business Activities Report



Future Financial Strategies/Shareholder Returns

	1 year		3 years		ars	10 years		
		Cumulative total	Annual rate	Cumulative total	Annual rate	Cumulative total	Annual rate	
DKS	9.8%	85.5%	22.9%	92.0%	13.9%	219.9%	12.3%	
ΤΟΡΙΧ	(9.5%)	(0.4%)	(0.1%)	1.8%	0.4%	78.4%	6.0%	
TOPIX Chemicals Index	(7.1%)	10.3%	3.3%	27.4%	5.0%	141.8%	9.2%	

Note: The annualized conversions are geometric averages of cumulative returns

Future Financial Strategies/Shareholder Returns

Under the REACT1000 five-year management plan, we set "maintaining and enhancing an appropriate ROE level" as our management policy, promising shareholders a change from comparative value stock to growth stock, which the Company believes it has adequately achieved. Going forward, while supporting medium- to long-term growth, we will continue implementing measures to optimize the cost of equity and plan to execute a financial strategy supporting the realization of even higher TSR. In our new medium-term management plan "FELIZ 115," which began this fiscal year, we will maximize the use of total assets resulting from systematic capital investments, targeting an asset turnover rate of 1.0, which is comparable to annual net sales. In addition, we will improve or withdraw from unprofitable businesses in the first and second fiscal years of the plan, and from the third fiscal year onward, we will strive to improve ROIC by increasing the return on invested capital. In terms of financial strategy, DKS aims to 1) realize an ROE of 10.0% or higher in the fiscal year ending March 31, 2025, 2) stably increase the P/B ratio by 1.0 times or more by maintaining ROE above the cost of shareholders' equity in each fiscal year of the plan, 3) ensure financial discipline while reducing the cost of capital to a reasonable level using moderate leverage and 4) achieve sustainable growth in addition to stable dividends. We will consider optimizing the cost of capital through flexible shareholder return measures that also include share buybacks. Moreover, in terms of M&A as part of growth investment, we will select investment projects for which ROIC exceeds the cost of capital and aim for a strategy emphasizing PMI (post-merger integration) that contributes to greater corporate value over the medium to long term.

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Where Have We Come From, Where Are We Going?

How Should We Manage?

Financial and Nonfinancial 11-Year Summary

Financial Data (Millions of yen)	3/2010	3/2011	3/2012	3/2013	
Net Sales	44,352	51,245	56,249	51,843	
Surfactants	14,373	15,131	18,779	19,486	
Amenity Materials	7,397	7,046	7,220	6,825	
Polyurethane Materials	7,161	8,761	8,634	8,466	
Functional Materials	9,467	11,441	10,228	9,666	
Electronic Device Materials	5,950	8,863	11,386	7,398	
Life Sciences					
Overseas Sales	6,692	8,748	8,296	7,323	
(relative to net sales ratio %)	(15.1)	(17.1)	(14.7)	(14.1)	
Operating Income	1,575	2,732	2,033	1,754	
Ordinary Income	1,239	2,439	1,742	1,544	
Profit Attributable to Owners of Parent	503	1,155	165	797	
Capital Expenditures	873	1,111	2,312	3,664	
Depreciation and Amortization	1,733	1,836	2,252	2,003	
R&D Expenses	1,863	2,010	2,273	2,340	
Net Cash Provided by (Used in) Operating Activities	3,061	2,502	2,309	2,477	
Net Cash Provided by (Used in) Investing Activities	(1,661)	(616)	(2,869)	(3,548)	
Cash Dividends Paid	195	298	298	298	
Amount of Treasury Shares Acquired	0	0	0	0	
Net Assets	15,316	16,498	16,949	18,200	
Total Assets	44,291	47,741	51,357	55,416	
Interesting-Bearing Debt ¹	14,499	14,098	15,700	18,712	
Per-Share Data (ven) ²					
Net Profit	64.45	146.90	19.35	93.40	
Net Assets	1.839	1.839	1.889	2.022	
Cash Dividend	25.00	35.00	35.00	35.00	
Maior Indices					
B&D Expenses to Sales Batio	4 2	3.9	4 0	4.5	
	3.6	5.3	3.6	3.4	
	3.6	7.7	1.0	4.8	
Faulty Ratio (%)	32.4	32.0	31 /	31.1	
Net D/E Batio (%)	0.75	0.54	0.60	0.66	
Dividend Payout Batio (11)	38.8	23.8	180.8	37.5	
Total Return Ratio (%)	38.8	25.0	180.0	37.5	
Veer End Steels Price x^2	1 220	1 205	1 220	1.250	
	20.6	8.0	63.6	13.4	
	0.7	0.3	0.0	0.6	
	1.0	0.7	2.0	0.0	
	1.9	2.1	2.9	2.0	
Nonfinancial Data					
No. of Employees (consolidated)	910	861	995	979	
No. of Employees (non-consolidated)	582	554	533	526	
No. of Employees Outside Japan	240	221	173	172	
Ratio of Female Employees to Total Employees (non-consolidated)	14.6	14.8	14.8	14.8	
No. of Employees Who Utilized the Child-Care Leave System (non-consolidated)	8	6	10	10	
No. of Employees Who Utilized the Child-Care Part-Time Work System (non-consolidated)	4	6	7	11	
Annual Paid Leave Rate (non-consolidated + assigned employees) (%)	71.4	69.0	66.7	62.7	
No. of Patents Held (overseas) ³	-	_	_	636 (237)	
Generated Waste Amount (tons) ⁴	9,912	15,774	13,395	14,421	
CO2 Emissions (consolidated) (thousands of tons) ^{4, 5}	37.4	57.5	49.8	51.9	

1. Lease obligations not included in interest-bearing debt.
 2. Per share information and period-end share price data have been retroactively adjusted to reflect the consolidation of five shares into one share implemented on October 1, 2018.
 3. The collation method was amended to a legal effective date basis from fiscal 2016.
 4. Data are presented on a non-consolidated basis up fiscal 2009 and on a consolidated basis including Yokkaichi Chemical from fiscal 2010.
 5. The carbon dioxide emission calculation method was revised in fiscal 2018 and applied retroactively from fiscal 2016.

3/2014	3/2015	3/2016	3/2017	3/2018	3/2019	3/2020
54,614	55,597	52,782	52,254	56,955	59,574	61,456
20,359	21,573	20,779	19,793	21,416	21,957	18,970
7,141	6,856	7,208	6,986	7,502	8,151	7,994
9,564	9,442	8,934	9,093	9,115	9,026	8,470
10,680	11,216	11,259	12,517	14,070	16,239	20,848
6,868	6,508	4,600	3,862	4,850	4,199	4,744
						427
8,103	8,743	9,131	8,794	9,929	10,139	10,350
0.477	2.044	2 420	2 044	 5 052	4.241	(10.8)
2,477	0.717	2,409	0,344	4 705	4,041	4,104
1,374	1 782	2 108	2 480	4,720	2.581	2 014
1,500	3.048	2,190	2,409	2.467	5,802	6 138
2 104	2 153	2.087	2,225	2,407	2,555	0,130
2,104	2,100	2,007	2,000	2,473	2,000	2,724
2,500	2,439	2,300	2,393	5.017	2,700	2,740
(1 703)	(3.220)	(7.687)	(3.336)	(1 130)	(5.604)	(5.842)
(1,790)	(3,229)	(1,007)	(0,000)	710	711	(0,042)
	474		1 000	110		(11
10,996	26 156	26 745	1,000	21.060	22 501	24.265
57 570	64 420	66.057	20,044	72.076	75.006	01 726
20,690	04,420	00,007	09,040	02.962	70,900	01,730
20,000	21,322	23,220	24,094	23,003	23,400	29,940
156.60	193.45	208.20	237.00	330.30	254.11	198.17
2,200	2,362	2,425	2,650	2,971	3,083	3,115
35.00	45.00	50.00	60.00	70.00	70.00	70.00
4.6	4.4	4.5	4.6	4.1	4.6	4.5
4.5	5.3	6.5	7.5	8.9	7.3	6.8
7.4	8.2	8.7	9.5	11.8	8.4	6.4
32.6	38.7	38.8	38.9	40.8	41.3	38.8
0.58	0.36	0.52	0.54	0.39	0.48	0.57
22.4	23.3	24.0	25.3	21.2	27.5	35.3
22.4	26.7	24.1	64.6	21.2	27.6	35.4
1,610	1,935	1,640	2,135	4,375	3,480	3,750
10.3	10.0	7.9	9.0	13.2	13.7	18.9
0.7	0.8	0.7	0.8	1.5	1.1	1.2
2.2	2.3	3.1	2.8	1.6	2.0	1.9
969	944	982	967	976	985	1,032
514	508	495	486	497	512	531
170	163	219	199	213	170	177
16.0	15.9	17.0	17.5	17.5	17.8	18.8
8	11	9	6	12	7	3
8	9	10	13	10	10	12
63.7	61.0	64.5	62.4	67.4	68.5	73.2
660 (245)	722 (299)	822 (344)	855 (378)	924 (427)	961 (453)	1,012 (479)
12,724	13,876	13,191	17,364	20,779	21,658	19,401
52.0	51.3	50.9	51.7	53.5	52.4	51.8

(21)

Financial and Nonfinancial Highlights

Financial Highlights (Consolidated)



Due to the remarkable growth of radiation-curable monomers/oligomers for IT and electronic applications in the functional materials segment, net sales for the fiscal year ended March 31, 2020, amounted to ¥61,456 million (up 3,2% year on year). The overseas sales ratio was 16.8% (down 0.2 percentage point year on year).

Dividend per Share/Dividend on Equity (DOE)



The annual dividend per share for the fiscal year ended March 31, 2020, was set at ¥70 in consideration of financial conditions, future business development and enhanced shareholder returns.

Nonfinancial Highlights (Group/Non-consolidated)



Number of Patents Held (Group)

600 533 508 497 477 478 300 ⁰ 3/2016 3/2017 3/2018 3/2019 3/2020

The number of patents held amounted to 1,012 (an increase of 51 patents year on year). In consideration of future business development, we are actively promoting the application and acquisition of intellectual property rights based on the results of research and development.

Generated Waste Amount (Group)



Operating Income/Operating Margin



Operating income was ¥4,154 million (down 4.3% year on year) in the fiscal year ended March 31, 2020, due to operating expenses such as the amortization of goodwill. The operating margin was 6.8% (down 0.5 percentage point year on year).

Interest-Bearing Debt



Interest-bearing debt as of March 31, 2020, increased by ¥6,479 million to ¥29,946 million due to the issuance of privately placed bonds for the purpose of raising working capital and equipment funds.

CO₂ Emissions (Group)



 $\rm CO^2$ emissions amounted to 51,800 tons (down 1,100 tons year on year). DKS will continue to work on improving energy efficiency with a focus on global warming prevention.

ROE Analysis Based on the DuPont Model





ROE declined to 6.4% from the previous fiscal year. ROE was affected by a lower sales profit ratio, stemming from lower profits, and a decrease in the asset turnover ratio, as an increase in interest-bearing debt pushed up total assets.





Number of Employees to Utilize the Child-Care Leave/Child-Care Part-Time Work Systems (Non-consolidated)



The number of employees using the child-care leave system was three (down from four in the previous year). The number of employees using the child-care part-time work system was 12 (an increase of two from the previous year). Of these 12 employees, two were men and 10 were women.





3/2016 3/2017 3/2018 3/2019 3/2020

The ratio of female employees to total employees was 18.8% (up 1.0 percentage point year on year). We will continue to conduct measures aimed at promoting women's participation and advancement.

Annual Paid Leave Rate

(Non-consolidated + Assigned Employees)



ESG Basic Policy

Basic Policies

We are confronted with a broad range of issues, from environmental problems such as global warming, resource depletion and a crisis of biodiversity to an increasing population that causes food resource and energy problems amid rapid globalization and an increasingly information-based society. We look to take on these challenges and to protect our environment and way of life while improving safety and level of comfort. To do these things, we pursue "Chemistry provides a solution" and contribute to the establishment of a sustainable society.

Important Issue Identification Process

At DKS, we are formulating "materiality," tackling issues from a long-term perspective. In the formulation of materiality, we have referenced the UN's Sustainable Development Goals (SDGs)*, ISO 26000 and other global guidelines, given the important demands that international society places on DKS as we work to advance business globally.

*At the UN Sustainable Development Summit held in September 2015, there were 17 SDGs adopted to find solutions to issues the world is facing.



Stakeholders	Importance for medium- to	Dialogue channel	Main KPIs (results indicator)	Important issues				
long-term value creat		Dialogue chainei	Main Nr IS (results indicator)		2	3	4	5
Employees	Most important capital for realizing DKS growth	DKSCOM (in-house newsletter), festivals, enhanced employee education at every level, health management (walking events, non-smoking guidance), mental health consultations, etc.	Employee satisfaction, health surveys (health examination consultation rate), diverse human resources activities (foreigners, women and mid-career recruitment), number of occupational accidents, smoking rate, annual leave acquisition rate, female manager ratio	*	*	*		*
Shareholders	Management evaluations supporting DKS growth	IR activities, stakeholder engagement, shareholder roundtables, Company newsletter (TACT), integrated report, shareholder newsletters and convocation notices, implementation of shareholder benefits	TSR, stock price valuation, number of dialogues, number of briefing sessions for investors, exercise of voting rights, ESG valuation, ROE				*	*
Customers	Partners as source of value creation	Promotion of Company-wide dialogue stance, Zenkoku Ichi-Ko Kai (association of DKS agencies), top diplomacy for inspiring/inspired partners, industry-government-academia collaborations	Number of inspiring/inspired partners, joint development projects, R&D expense ratio, patent acquisitions	*	*			*
Society	The basis for promoting ESG management	Dissemination of various information, employees' outside activities	CO ₂ emissions, energy consumption, number of environmentally friendly products, interaction with local communities, development of life science products, number of focus products	*	*	*	*	*

Please refer to our website for details on the promotion of occupational safety and health.

Relationship between the Five Important DKS Issues and Global Guidelines

Important issues	Activity details	Relation to global guidelines			
important issues		SDGs	ISO 26000		
1	Providing highly safe products	12 ASTOCIAL ACTIVICATION ACTIVICATION	Consumer issues		
Quality and Safety Management	Ensuring quality assurance and securing product safety	12 ADMENT	Consumer issues		
≫ P.28	Promoting occupational safety and health $>$ To website	3 (0001481) 	Labor practices		
2	Responding to potential and apparent needs with Uni-Top strategy promotion	17 minetaer:	Consumer issues		
Research and Development	Developing products that contribute to the environment		Environment		
≫ P.30	Promoting an intellectual property strategy	9 KONTER, MONTER NA VILLINGUER	Fair operating practices		
3	Securing and nurturing outstanding human resources	9 Martine Annuality Ann Priodonaiste	Labor practices		
Human Resource Management	Promoting diversity	5 exer ©	Human rights		
≫ P.32	Health-based company management initiatives	3 (0001481) 	Labor practices		
4	Environmental conservation initiatives	7 BIORMER MO DIALOGRAP	Environment		
Consideration for the Environment	Preventing global warming (saving energy)	13 dates 13 dates 13 dates 13 dates 13 dates 13 dates 14 dates 15 dat	Environment		
	Managing chemical substances	12 and and the second s	Environment		
≫ P.34	Reducing emissions of environmental impact substances	12 assarts Arrows	Environment		
5	Strengthening the corporate governance system	16 ACCANER ANDERE EXTENSION STATES	Organizational governance		
Organizational Resilience	Establishing a compliance structure	16 Net Autor Actured Actured	Fair operating practices		
≫ P.38	Strengthening risk management	11 ISSUMALIDATE INCOMPATING ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL ADDITIONAL	Organizational governance		

SUSTAINABLE GOALS



Risks and Opportunities

Identifying Significant Risks at DKS

In terms of risk management, the Company established a Risk Management Control Committee as a systematic response and formulates activity plans, reviews activities, identifies risks and examines countermeasures. (Please refer to page 41.) Based on the results of such activities, in producing the DKS Report 2020 we identified risks from the viewpoint of information that is of great importance to the Company's stakeholders, namely in terms of materiality (significance). The procedure for extracting that information is set out below.

Identify risks

1	Confirmation of risks recognized in the organizational risk management system
2	Identification of risks that should be recognized at the six business segments
3	Matrix analysis based on the importance of each risk (the degree of impact on stakeholders) and the probability of risk becoming evident (possibility of negative impact due to occurrence/disclosure)
4	Extraction of significant risks from the viewpoint of materiality in integrated reporting
5	Analysis of impact and response to those risks when they occur



Risks That Lead to Opportunities

Although an event could damage the broad value of a company, risk might also lead to opportunities. DKS considers risks in a segregated manner: the avoidance of risk and the formulation of strategies in cases where corporate value can be increased

Example of Potential Risk: Naphtha Price Fluctuation

The domestic price of naphtha, the main raw material for our products, rose to more than ¥70,000 per kiloliter in the fourth quarter of 2014. It then fell to around ¥31,000 in mid-2016 and was in the low ¥40,000 range in 2019. In the second quarter of 2020, it fell to around the mid-¥20,000 range. Measures against naphtha price fluctuations might include risk hedging using derivatives, including futures and foreign exchange rates, but they are only partially effective.

Increases and decreases in costs due to such raw material price fluctuations could lead to pressure on profits, the burden of

by responding well to risk. The Company would like to practice management that can respond appropriately to risks to achieve sustainable growth.

price negotiations and even the loss of customers. On the other hand, the contact points with customers during price negotiations, and the gathering of detailed information, give rise to opportunities to acquire new orders by replacement with new materials. If we can present more advantageous transaction conditions for customers compared to other companies in the same industry, it could lead to an increase in market share. This is one example of how we can seize risk-associated opportunities.

Overview of Significant Risks

The table on the opposite page summarizes the significant risks (12 items) to which DKS is exposed and outlines the impact of and responses to those risks as well as the accompanying opportunities created by them.

How Can We Be Sustainable?

Significant risks	Impacts from risks	Responses to risks and opportunities		
	Profits come under pressure from cost fluctuations.	Increased contacts with customers through price negotiation activities		
 Fluctuation in raw material prices, centering on 	Time taken for price negotiation activities to maintain the profit margin.	proposals for new themes.		
naphtha	Decline in market share, lost ground due to price negotiations (transfer to another company in the same industry).	If more price competitive than other companies in the same industry in a similar environment, market share could increase.		
② No raw materials production in the	Inability to control prices depending on raw material prices.	There is no need for fixed costs, giving rise to predominance at times of economic downturns.		
manufacturing sector	Business continuity plan (BCP) measures become necessary.	Costs can be reduced by searching for inexpensive raw materials.		
3 Large number of customers	Time taken and costs incurred in customers' response.	Information on each industry is easily obtainable due to having customers in every field. Revised in "FELIZ 115."		
4 Product composition consists of a large variety	Cost of small-lot product processing becomes expensive, cost competitiveness declines.	Possessing a lineup of products that can be used in each field enables a variety of solutions to be proposed.		
of small-lot products	Time required for research, sales and responses to problems due to a variety of products.	→ Product composition revised under "FELIZ 115."		
5 Many single material sales	Sales of single surfactant materials are competitively inferior to those of overseas competitors and major manufacturers specializing in bulk manufacturing.	Facilitate improved competitiveness by promoting the Uni-Top strategy, which does not pursue volume.		
6 Increasing demand for inexpensive products associated with growth in emerging nations	Decrease in profit margin due to the sales composition ratio being weighted toward inexpensive products.	Promote a differentiation strategy through solution proposals, cost reductions, Japanese quality and customization.		
Improvement in technological level and	Concerns about losing competitiveness in domestic and overseas markets.	Cooperation and alliances with overseas companies.		
productivity in neighboring countries	Concerns about patent infringements overseas.	Enhancement of a patent strategy.		
	Required to maintain compliance in accordance with legal revisions to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, Poisonous and Deleterious Substances Control Act, etc.	Should the same thing happen with another company's product, it can be regarded as an opportunity to replace it with a DKS product.		
(8) Strengthened laws and regulations	An associated sequence of work takes time starting with contacting customers supplied, proposals of alternative products, performance evaluations, 4M (man, machine, material and manufacturing method) changes, revision of standards, etc.			
	Cost, time and labor involved in replacement work due to a large number of varieties.			
Stricter quality controls	In fields such as enerov-related, pharmaceuticals and foods, a higher	Effective utilization of good manufacturing practices such as Ikeda Yakusou being GMP-certified in the life sciences field.		
≫ P.41	level of quality control is required than with industrial chemicals, and know-how is necessary.	Utilization of the Kibi Plant as a fine (high-quality) chemical facility specializing in the life sciences and energy-related fields.		
Risk Management		Formulate and implement product liability (PL) prevention management rules.		
	Some facilities used for many years are becoming obsolete.			
	As they would not bring about enough profit to meet new capital investment, products for which the Company is uncertain as to their business continuity would be manufactured at those aging (and less efficient) facilities.	An opportunity to make business continuity decisions, enabling the beginning of a portfolio review.		
	The scale of facilities is not matching the production volume due to a decline in sales. Decreased efficiency and concern for quality problems due to small-lot production.	Promote production system enhancements and improved production efficiency by making the Kasumi Plant a mother plant.		
	Rise of product unit cost due to production cost leads to lowering of price competitiveness.			
(1) IT security				
≫ P.41 Risk Management	Leak of confidential information due to a computer virus or an internal management error.	Strengthen compliance through employee training and appropriate measures against unauthorized access.		
	Impact on production and shipments caused by employee infections.	Promote work-style revisions through working from home and telework.		
activity due to the spread of an infectious disease	Impact on business performance from the delay or suspension of raw materials procurement, production or the provision of products to users, caused by supply chain disruptions.	Revise the supply chain and strengthen BCP measures.		

Important Issue 1

Quality and Safety Management



Improving the quality of products and services offered by corporations will lead to meeting the needs of customers and society, earning trust and enhancing the value provided to society and related capital. To this end, DKS views quality from four perspectives: design and development, manufacturing, sales and customer service. We strive to improve quality in collaboration with customers and suppliers.



As a chemical partner conveying the essence of high functionality for the future, we will provide customers with safer, higher-quality products that maximally contribute to the development of their business. To realize this, we engage in quality control using the PDCA cycle based on our fundamental quality assurance and quality policy in an effort to improve quality and customer satisfaction.

Fundamental Quality Assurance

- We establish quality-related management standards for each department that cover the entire process, from product planning to customer service through design/development, manufacturing and sales. Through the appropriate operation of such standards, we strive to provide high-quality products that are safe and reliable, maintain and improve product quality and provide quality assurance for our customers.
- 2. To effectively bring about quality assurance functions throughout the entire Company, we establish and maintain a quality management system.
- All our employees must observe this basic concept of quality assurance and carry out tasks in accordance with the Quality Assurance Management Regulations.

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FŦ	東々は	お客	様の	事業	の	e展の	ot=	め最	大限の貢献をします
1)	当社の の高い 当社に	い 類品: は常に、	が満足 を、顧 より高	する影響が要	国の東す	設計と る納税 を目指	品例	の確 通切 品質	立を目前し、信頼性、安全性 な価格で提供する。 マネジメントシステムの
	有效也	EICOI	NT ME	統的な	改善	を推測	16.	朝客	満足の向上に努める。
									第一工業制羅接大会社 生產本都長 (確論·安全品質保証例為)
KS C	Quality F	Policy"							

Quality Control System

As a chemicals manufacturer, we are committed to the maintenance and improvement of product quality using ISO 9001 as a basic tool in our quality management system. We execute PDCA cycles to provide products and services that comply with customer requirements as well as with laws and regulations. We work on day-to-day activities such as production control, corrective measures and preventive actions relative to nonconformities (such as complaints/abnormalities), audits, change control and training and devise improvements by conducting continuous reviews of the management system. While aiming to improve customer satisfaction, we are promoting the further integration of ISO and business activities.



Quality Assurance

We view QA as fundamental to our business, and as we keep our Quality Policy in mind, we continue to promote QA activities from product design/development, manufacturing and sales to customer service processes through the relevant departments of the Sales Headquarters, R&D Headquarters and Production Headquarters. With the Chairman CEO as the Chief Quality Assurance Officer, environment, safety and quality assurance staff raise quality assurance issues, have the authority to formulate and recommend solutions, and have overall responsibility for the quality management system. Led by the QA Department General Manager, the QA Department is tasked with taking the lead role in supervising quality assurance and in overall coordination between our departments, while attempting to establish and strengthen the QA system. In line with diversifying customer demands and heightened requirements for product quality from a social perspective, we remain committed to working to ensure product safety and quality, as well as trying to prevent quality-related issues before they arise.

QA System Diagram



Where Have We Come From, Where Are We Going?

Product Safety (chemical substance management from design development)

We have in place a product development system based on our environmental and safety philosophy, which is centered on "contributing to the sustainable development and realization of happy societies by considering human health, safety and environmental preservation throughout the life cycle of each product, from development to scrapping." Ensuring compliance with laws and regulations related to chemical substances in Japan and overseas, we formulate chemical substance management rules, conduct the appropriate management of chemical substances, and undertake design and development that as far as possible considers the environmental impact. We are also promoting the building of a system that enables the appropriate relaying of information on the chemical substances contained in our products and information on applicable laws and regulations throughout our supply chains.

Product Safety Mechanism



Compliance with Chemical Substance Laws and Regulations

With the goal of obtaining the latest information and enacting management measures to ensure compliance, we continue to monitor trends in not only domestic laws such as the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., the Industrial Safety and Health Law, the Food Hygiene Law, and the Poisonous and Deleterious Substances Control Law but also the Export Trade Control Order in regard to products for export, and other export regulations, including those dealing with conflict minerals and rules regarding the registration of chemical substances. We also focus on the sharing of information by using groupware to transmit outlines of revisions to laws and regulations.

Provision of Product and Technical Information

Our products are utilized in a variety of industrial fields, and we provide product and technical information tailored to the characteristics of each product and service. We always respond to requests and inquiries from our customers quickly, adequately and in good faith. We also provide information on hazardous materials to ensure safe handling, including that relative to product properties, applicable laws and regulations, transportation, handling methods and emergency measures by means of safety data sheets (SDSs). We provide information using chemSHERPA, an information transfer scheme for chemicals contained within products throughout the supply chain. We also promote product labeling and issue an SDS related to compliance with the GHS* and with local regulations for exports to the United States, Europe and Asia. We continuously update our SDSs and labeling to remain in compliance with the revised Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., and the Industrial Safety and Health Law, as well as the Poisonous and Deleterious Substances Control Law. When introducing our products, we not only focus on close communication with our customers through daily business meetings but also disseminate information through brochures and technical documents.

*Globally Harmonized System of Classification and Labeling of Chemicals

Efforts to Reduce Complaints/Nonconforming Products

Because we position quality-related nonconformity (complaints/deviation) and our response to that as an important issue for securing quality, we check any appearance of nonconformity, determine the cause and verify the corrective action and its effectiveness to prevent reoccurrence. Details of complaints and anomalies are centrally managed by groupware to share information and are horizontally deployed Companywide to prevent similar nonconformities from occurring. In addition to our efforts aimed at preventing the reoccurrence of nonconformity, we recognize the importance of responding to our customers with speed and appropriate measures whenever such an event occurs. In the years to come, we will continue to strive to improve customer satisfaction by focusing on being imaginative and creative while promoting ongoing efforts to reduce nonconformity and prevent any recurrence should an incident arise.

DKS REPORT 2020

Five Important Issues

Important Issue 2

Research and Development



Technology is important intellectual capital for DKS, an important foundation supporting management strategies for sustainable growth. In terms of future business development, we are actively promoting applications for and the acquisition of intellectual property rights based on the results of research and development in pursuit of the concept "Chemistry provides a solution."

DKS's Foundation That Underpins Strategies

As a leading industrial chemical manufacturer, it is our management philosophy to continue to be a prominent company that responds to the expanding chemical requirements of industries. To realize that philosophy, we are focusing on the research and development of high-value-added products, with a particular focus on products with IT and electronics-related applications, and the development of new applications for battery materials and cellulose nanofibers. With innovative wisdom and technologies, we are pursuing "Chemistry provides a solution" in every industry and developing products that can contribute to a sustainable society.

R&D Basic Policy and Promotion System

In fiscal 2020, the R&D Departments of the Business Divisions were integrated into the single R&D Department, and for Companywide research themes and the development of new businesses and technologies, DKS also created the Corporate R&D Department, the New Business Development Department and the Drug Formulation Development Department aimed at strengthening our research structure.

The Elexcel R&D Department develops applications for battery materials. The Life Sciences Supervisory Department is focused on the

development of new applications for cellulose nanofibers and will focus efforts on R&D centered on extraction and concentration technologies, as well as mass production technologies, including I-Japonica Bombyx Fungus and "sudachi citrus" under the umbrella of the newly acquired Biococoon Laboratories, Inc. and Ikeda Yakusou Co., Ltd. In addition to promoting in-Group cooperation, we are working to accelerate

R&D Investments

In fiscal 2019, the total expenses required for R&D amounted to ¥2,748 million, which represented 4.5% of net sales. The total number of R&D personnel of the Company and the domestic subsidiary companies was 208, which was equivalent to around 20% of all employees (as of March 31, 2020).



Research Personnel



research and development through collaboration with outside entities such as public research institutes, universities and customers. The Production Technology Department provides support for the innovation and creation of new production technologies.





Intellectual Property

Mindful of future business development, we actively promote the filing and obtaining of intellectual property (IP) rights based on R&D results. Recently, we have been focusing on improving the quality of our patents through enhanced information retrieval functions. We will continue to respond to the globalization of our business and acquire rights securely for important domestic and foreign markets.



DKS REPORT 2020

Our Products and Technology Development

We supply products that meet environmental requirements, including global warming prevention, energy and resource saving, environmental protection and prevention of environmental pollution, and engage in the development of related technologies.

Environmental requirement	Functions and features	Our product lineup and technology/Application			
		Lithium-ion batteries			
	Clean anarray	CELLBINDER Series	Binder for lithium-ion batteries		
Olahal Warraia a Davidation	Clean energy	ELEXCEL ACG Series	Gel polymer for lithium-ion batteries		
Global warming Prevention		DD-1200C Series	Conductive paste for solar cells (lead-free)		
	Halagan fraanaa	DK BE-CLEAR Series	Waterborne detergents		
	nalogen-ireeness	DK POLYOL 3000 Series	HFC1-free water-reactive polyols for urethane foams/Insulating materials		
		COLOURSOL CT-171D	Dye accelerating/Leveling agents for polyester		
	Energy efficiency	NEW FRONTIER Series	Solvent-free UV/EB-curable monomers/Adhesives, coating agents		
Energy & Descurse Caving		DK SYSTEM NF Series	HFC-free systems for rigid polyurethane foams/Insulating materials		
Energy & Resource Saving	Effective resource utilization Extension of life span	Slag anti-solidification agents			
		ELEXCEL IL Series	lonic liquids/Energy device materials		
		EIMFLEX Series	Polyurethanes for electric insulation/Sealants		
		NOIGEN XL Series, NOIGEN TDS Series	Nonionic surfactants/Emulsifiers, cleaning agents		
	Eco-friendliness	RHEOCRYSTA Series	Cellulose nanofiber water dispersions		
		AH212	Organic alkaline agent		
		SUPERFLEX Series	Polyurethane water dispersions/Paints, coating, binders		
Environmental Protection	VOC ² raduction	EIMFLEX WF Series	Waterborne single-shot polyurethanes for electric insulation/Sealants		
Prevention of Environmental		ELASTRON Series, ELASTRON BN Series	Thermoreactive polyurethane water dispersions/Binders, adhesives		
Pollution		NEW FRONTIER Series	Solvent-free UV/EB-curable monomers/Adhesives, coatings		
	Deduction of anyironmontal impact	HITENOL Series, NOIGEN Series	Polymerizable surfactants/Emulsifiers for emulsion polymerization		
	Reduction of environmental impact	TRIBIO Series	Polylactic acid modifying agents		
	Removel of contaminanta	SEACLE N-800	Marine oil spill treatment agent		
		DEOPELLET Series	Foul odor gas absorbents		

1. HFC: Hydrofluorocarbons 2. VOC: Volatile organic compounds

Products to Meet Environmental Requirements

The Company has been developing products made using sugars and cellulose, which are eco-friendly materials that are derived from plants and are renewable. Among them, the cellulose nanofiber RHEOCRYSTA possesses unique physicochemical properties due to its single-digit nano size, and the Company is advancing the development of applications

so that this product can be used as a highperformance additive in, for example, inks, cosmetics, ceramics and batteries.



The Company began to manufacture and sell HITENOL and NOIGEN Series polymerizable surfactants in the 1980s. Such eco-friendly products as water-based paints and adhesives, which have been popular in recent years, offer excellent water resistance and adhesiveness. The new product HITENOL AR Series offers excellent copolymerization qualities with a

wide range of monomers and improves the water resistance of and inhibits the formation of bubbles in paints and adhesives.



Important Issue 3

Human Resource Management



Human capital is the most important asset for DKS, and we aim to maintain talented human resources and diversity based on the idea of valuing people. We recognize the growth of employees to be the driving force for the development of the Company, leading to a wide range of enhancements in corporate value.

Human Resource Philosophy Respect for Humanity

Our fundamental human resource philosophy is rooted in the idea that our people are our assets and must be nurtured and treasured.

Our basic understanding is that the growth of our people will support the growth of the Company. The employees are supposed to actively play their roles in each workplace; learn, grow and exhibit their capabilities; and try to fulfill themselves. This way, we believe that they become the power of prosperity of the Company and the source to make it eternal.

The Company also supports the maintaining and improving of employee health, which forms a cornerstone of individual employee selffulfillment.

Human Resource Development Policies

1. Development of Professional Workers

We aim to train professional human resources who have high market value and can work on their own initiative.

- 1) People possessing advanced, specialized skills
- 2) People who recognize and achieve their roles and goals
- 3) People who raise and solve issues themselves
- 4) People who demonstrate leadership in the workplace
- 2. Development of Autonomous Personnel

Switch to human resources able to work on their own initiative through their own motivation

Respecting Human Rights and Diversity: Promoting Diversity, Human Resource Development and Education

Work-Style Reforms

Work-Life Balance

DKS takes the initiative in activities supporting a balance between work and family. In terms of systems, we formally introduced a telecommuting system in fiscal 2019 and a flextime system in fiscal 2020 and are working to reform the personnel system to improve employee productivity and realize diverse work styles.

Promotion of Employee Participation and Advancement

Having set up an Employee Participation and Advancement Promotion Committee chaired by a senior management member, we are aiming for a human resource group capable of successfully contributing to improvements in Company performance. We are creating environments in which we can maximize the abilities of diverse employees, including

women, seniors, people with disabilities and members of the LGBT community, and enable them to take an active part in our Company. We also held a seminar on long-term care in 2019 to support balanced work that can be done by both men and women.



Promotion of Women's Participation and Advancement

In addition to environments that facilitate women in working for many years, we will maintain work environments that enable women to develop their careers and implement measures aimed at having 10.0% or more of managerial positions occupied by women.

Retiree Reemployment System

In reemploying all applicants, we conduct *monozukuri* (manufacturing) by handing down the techniques and skills that make the best use of the experience they have accumulated over many years.

Employment of People with Disabilities

We consider people with disabilities as a valuable asset to our workforce, and in addition to safely clearing the statutory employment rate for persons with disabilities, we aim to further improve retention rates and are proactively engaged in creating abilities through training that understands the aptitude of the respective individuals.

Efforts to Prevent Harassment

We are trying to prevent harassment through, for example, educational programs in hierarchical training courses. Several persons are selected as contacts, even from outside the Personnel Department, so that anyone can easily find someone to talk to and get advice from. Moreover, whistleblower portals inside and outside the Company, as well as an external Employee Assistance Program (EAP), are in place.

Human Resource Development and Education Systems

The three pillars of our human resource development and education programs are in-house on-the-job training, external education to learn skills and abilities, and assisting self-development. In recent years, we have focused on joint training with other companies to nurture next-generation leaders and enhancing our brother/sister program (reinforcement of a backup support system for new employees) aimed at a 0% attrition rate for new employees, and the development of human resources for the digital transformation targeting the realization of disruptive innovation utilizing data and IT technologies.

We also conduct global mindset training to ensure young employees are aware of activities overseas as soon as possible, cross-cultural understanding and skills training sessions for mid-level employees and in-house, selective training involving visits to subsidiaries overseas for employees with high global awareness.

DKS is focusing attention on human resource training in other areas as well, including by bolstering its support for employees aiming to improve their own abilities, be it through correspondence learning, the acquisition of qualifications or other forms of self-development.

Items	FY2019 Results
Annual paid leave taken	73.2%
Male employees taking child-care leave	66.0%
Ratio of women in managerial positions (as of March 31, 2020)	9.1%
Employment of people with disabilities (as of March 31, 2020)	3.1%
Employment of people with disabilities (to third year of employment)	87.5%
New graduate attrition rate (to third year of employment)	3.1%

Where Have We Come From, Where Are We Going?

Health-Based Company Management ("Kenko Keiei") Initiatives

We aim to bolster the Company's productivity, and thus its corporate value, by maintaining and improving the health of our employees. This initiative is reported to committees and meetings attended by officers in charge to obtain approval for plans formulated based on these results.

Concept of Health-Based Company Management



Efforts in Health-Based Company Management

DKS was selected by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE) for the first time as a "Health and Productivity Management Brand 2020." For the third consecutive year, DKS and subsidiaries Gembu Co., Ltd., Dai-ichi Kenkou Co., Ltd., Dai-ichi Ceramo Co., Ltd., Kyoto Elex Co., Ltd., and from this year, Ikeda Yakusou Co., Ltd. were certified as White 500 Organizations (sponsored by METI and Nippon Kenko Kaigi). We also acquired the highest health management rating from the Development Bank of Japan Inc. (DBJ) for the third consecutive year.

Going forward, assessments of Company efforts through the eyes of external organizations will continue to lead to further enhancements in corporate value.



Targets, Activities and Outcomes

Based on our Healthy Company Declaration, DKS strives to maintain and improve the health of its employees, and at the same time, stipulates guidelines for employee health activities and promotes Company-wide health maintenance. The employee health guidelines consist of five items aimed at improving productivity and enhancing corporate value through the maintenance and improvement of employee health. From fiscal 2017, we have been developing practical measures to enhance lifestyle-related disease and metabolic syndrome prevention and countermeasures that go beyond education and training, including walking events, the creation of training rooms and the provision of healthy menus in employee cafeterias. As a result, from fiscal 2016 to fiscal 2019, the discovery of health problems decreased 2.3%, the number of people aged 40 or older who maintained proper body weight increased 6.9% and the rate of secondary health examinations was maintained at 100%. We also provided counseling to all new employees who were nervous about their new job. Feedback questionnaires revealed that hurdles for counseling were lowered. In fiscal 2019, we began providing counseling for newly appointed managers and will continue this practice in the future.

Health Issue Improvement KPIs

Issue	1. Prevention of issues among healthy employees	2. Prevention of aggravation among high-risk employees	3. Prevention and early detection of employee mental health issues	4. Creation of environment leading to quitting smoking
Кеу	Employees who exceeded abdominal girth standards	Employees 40 years or older at risk for or experiencing metabolic syndrome	Leave taken by employees with mental health issues	Employees who smoke
Performance Indicator (KPI)	Current figure (2019) 30.7% Target figure (2024) 25.0%	Current figure (2019) 26.6% Target figure (2024) 22.0%	Current figure (2019) 0.2% Target figure (2024) 0.2% or less	Current figure (2019) 21.4% Target figure (2024) 11.4%

Important Issue 4

Consideration for the Environment



Natural capital is a critical common asset for chemical manufacturers, making sincere responses to various environmental problems a common global issue in the aim for economic development and conservation of the global environment. DKS will always face social issues, protect human environments and lifestyles, and contribute to the creation of a sustainable society as "chemistry provides a solution" for improving safety and comfort.

Basic Philosophy and Basic Policies for Environmental and Safety Practices

Basic Philosophy

Our basic philosophy is to contribute to society by making a company that thrives together with local communities and employees by supplying products that satisfy customers. Based on this, our environmental and safety philosophy is to contribute to the sustainable development and realization of happy societies by considering the human health, safety and environmental preservation throughout the life cycle of each product from development to scrapping.

Basic Policies

- Throughout the life cycle of each product from development to scrapping, we evaluate and minimize the impact of business activities on the environment and make our best efforts to preserve the environment.
- 2) We aim at accident- and disaster-free operations to secure the safety of both local communities and employees.
- 3) We confirm the safety of raw materials, semifinished products and final products to prevent health-related disorders of all relevant people including, but not limited to, employees, logistic/transportation workers, customers and general consumers.
- 4) We strive to continuously improve the safety and environment not only by strictly complying with relevant legislation and regulations but also by self-management.

Responsible Care (RC) Activity Promotion System

We set up the safety and environment philosophy, as well as basic and action policies, based on which we promote our corporate activities related to quality, safety and the environment. Such issues are discussed and decided by the RC Promotion Conference, which is the top decision-making body and is chaired by the president.

Moreover, we regularly hold environmental preservation meetings, safety and health meetings and quality assurance/product liability

meetings chaired by the quality, safety and environment personnel and joined by plant general managers and relevant department managers. In these meetings, corporate targets, action plans and results are discussed to promote RC activities. Under each of these meeting organizations is a committee to make, implement and evaluate specific action plans for continuous improvements.

RC Promotion System Diagram



1. EMS: Environmental Management System

2. SHMS: Safety and Health Management System

3. QMS: Quality Management System

Management System

In addition to promoting the comprehensive safety management of chemical substances based on the RC Code, which consists of seven factors derived from Japan Chemical Industry Association (JCIA) policies—environmental conservation, safety and disaster prevention, occupational safety and health, logistics safety, chemical and product safety, dialogues with society and the management system—DKS is working toward improvements in environmental conservation and quality, using environmental and quality ISO standards as tools.

Observation of Environmental Laws and Regulations

Environmental risk management is an important measure to minimize environmental risks and/or the consequent damages caused by risks. We comply with environmental-related legislation and regulations and agreements with local municipal governments based on the Declaration of Action by Board Members and Employees, and there were no violations of laws or regulations in fiscal 2019. All our production plants in Japan are regularly checked for environmental compliance in accordance with the ISO 14001-based environmental management system. Up-to-date information on legislation is checked and understood on a timely basis and disseminated internally to ensure compliance. Recently, education programs using an e-learning system have started.

Environment-Related Complaints

In fiscal 2019, there was one noise complaint. We took immediate steps to investigate the cause and examine corrective measures. As a result, problematic noise was reduced by suppressing equipment

vibration and installing sound absorbing panels. We will continue to engage in environmentally friendly operations while gaining the understanding of nearby residents.

Environment Accounting

In fiscal 2019, Group investment in environmental-related systems was spent mainly in the field of energy saving. Resource circulation-related costs accounted for a relatively high ratio of costs tied to preservation

Investments and Costs of Environmental Protection Activities

Category	Main activities	Investment (Millions of yen)	Costs (Millions of yen)
	Air/water/other pollution prevention	12.9	198.1
Costs within the plant premises	Global environment preservation, energy saving	23.2	90.4
piant promiseo	Resource recycling, resource saving, waste treatment/disposal	0.0	496.3
Upstream/ downstream cost	Lowering the environmental impact in containers/packaging	0.0	0.1
Administrative cost	ISO acquisition/maintenance, greening of branch premises	1.3	38.7
R&D cost	Environmentally responsive R&D	0.0	650.2
Social activity cost	Providing support grants for environmental protection to environmental preservation groups or local communities	0.3	1.2
Environmental damage cost		0.0	0.0
Total		37.7	1,475.0

of the environment. The economic benefits therein include profits on the actual sales of valuable resources and the amount of cost savings and are not based on estimated economic benefits.

Economic Effects Generated by Environmental Protection Measures

Category	Main activities	Costs (Millions of yen)
Sale of valuables	Gain on sale of metal scrap, waste oil and waste alkali, etc.	2.8
Energy-saving measures	Cost savings in electric power and fuels	0.4
Resource-saving activities	Cost savings through reduction of water use/ waste	0.0
Total		3.2

Fiscal 2019 Activity Targets and Results, Fiscal 2020 Activity Targets Evaluation A: Significant result B: Result in line with the target C: Target remains unachieved

Target parameter	Management items	Fiscal 2019 activity targets	Fiscal 2019 results	Evaluation	Refer to page	Fiscal 2020 activity targets based on medium-term environmental targets (FY2020–FY2024)
Promotion of energy saving	Energy consumption per unit	1% improvement compared with fiscal 2018	Up 9.8% YoY	С	P.36	Improve more than 1% YoY based on fiscal 2019 results
Reduction of GHG emissions	CO ₂ emissions ¹	29.5% reduction compared with fiscal 2005 on average from fiscal 2016 to fiscal 2019	26.8% average reduction from fiscal 2016 to fiscal 2019 compared with fiscal 2005	С	P.36	Decrease more than 1% YoY based on fiscal 2019 results
	Waste generation per unit	1% improvement in the fiscal year rate of non-consolidated DKS ³	Down 8.3% YoY	В		Amount of waste generated to decrease more than 1% YoY based on fiscal 2019 results
Reduction of industrial					P.37	Non-consolidated DKS final disposal rate to be maintained at under 0.1%
Waste	Final disposal rate ²	3.4% or less in fiscal 2019	4.9%	С		The DKS Group will reduce the final disposal amount by 100 tons or more compared with fiscal 2019 results in fiscal 2024
	SOx emissions		Up 17.7% YoY	С	P.37	Reduce emissions of environmental pollutants in the air
Reduction of environmental	NOx emissions	Reduced emissions of environmental nollutants in the air	Up 34.1% YoY	С		
impact substance	Dust emissions		Down 22.8% YoY	А		
emissions	Water discharge	Reduced emissions of environmental	Down 5.4% YoY	В		Reduce emissions of environmental pollutants in water
	COD emissions	pollutants in water	Down 30.2% YoY	А		
Proper management of chemical substances	PRTR Regulation ⁴ - designated substances emissions	Reduced emissions of PRTR Regulation- designated substances	Up 0.4% YoY	С	P.36	Reduce emissions of PRTR Regulation-designated substances
Promotion of green procurem	nent	Promoting the green procurement ratio of office supplies	29.4%; 1.5-percentage-point improvement YoY	В	—	Improve the green procurement ratio of office supplies
Elimination of disasters/accidents		No occupational accidents (that cause days away from work)	One incident	С	Posted on our	Achieve zero environment-related accidents
		Eliminating severe accidents associated with production facilities	No accidents occurred	В	website	Comply with environmental laws and regulations
Environmental management	system	Promoting an environmental management system	Maintained	В	P.34	Promote an environmental management system

Derived from energy in the production and administrative sectors
 The ratio of the final disposal amount to the generated waste amount
 We have decided not to set numerical targets for the Group until the method of recycling sludge newly generated from the wastewater treatment plant is established at a subsidiary company.
 PRTR Regulation: The emission and transfer amount of notification substances under the PRTR Regulation

Important Issue 4

Consideration for the Environment



Global Warming Prevention (Energy Saving)

In the fiscal year ended March 31, 2019, Group energy consumption amounted to 25,800 KL, a 0.4% decrease compared with the previous fiscal year, however, the energy consumption per unit increased 9.8%, which means that we were not able to achieve our fiscal year targets. This is mainly because, compared to the previous fiscal year, the proportion of products requiring energy increased due to changes in the product mix. In fiscal 2019, we recorded 51,800 tons of carbon dioxide emissions, a 1.2% decrease compared with the previous fiscal year and a 27.7% reduction compared with fiscal 2005. This is an average 26.8% reduction compared with fiscal 2005 from fiscal 2016 to fiscal 2019, meaning the target was not reached. With the start of new medium-term targets in fiscal 2020, we will continue to work to improve the efficiency of our energy use toward the achievement of our five-year targets.

Targets and Performance in Fiscal 2019

Evaluation A: Significant result B: Result in line with the target C: Target remains unachieved

Target parameter	Management items	Activity targets	Performance in fiscal 2019	Evaluation
Promotion of energy saving	Energy consumption per unit	1% improvement compared with fiscal 2018	9.8% increase compared with fiscal 2018	С
Reduction of GHG emissions	CO ₂ emissions	29.5% reduction compared with fiscal 2005 on average from fiscal 2016 to fiscal 2019	26.8% reduction compared with fiscal 2005 on average from fiscal 2016 to fiscal 2019	С

Changes in Energy Consumption

(Yokkaichi, Ohgata, Shiga, administrative sectors, domestic subsidiaries)



Domestic subsidiaries include Yokkaichi Chemical Co., Ltd., Kyoto Elex Co., Ltd. and Dai-Ichi Ceramo Co., Ltd
 The calculation method for energy consumption was revised in fiscal 2019.
 Data for fiscal 2016 and fiscal 2018 have been retroactively adjusted.

Proper Management of Chemical Substances

The DKS Group had a total of 67 notification substances under the PRTR Regulation in fiscal 2019. The total amount of emissions was 61.2 tons, which resulted in a 0.2-ton (0.4%) increase compared with the previous year. The breakdown was 60.6 tons to air, 0.57 tons to water and none to land. Emissions amounted to 51,800 tons (down 1.2% YoY), a 27.7% decrease compared with fiscal 2005. The average reduction from fiscal 2016 to fiscal 2019 was 26.8% compared with fiscal 2005, meaning the target was not achieved. With the start of

Changes in CO₂ Emissions

(Yokkaichi, Ohgata, Shiga, administrative sectors, domestic subsidiaries, derived from non-energy)



2. The CO₂ calculation method was revised in fiscal 2019 and retroactively adjusted for fiscal 2016.

new medium-term targets in fiscal 2020, we will continue to work to improve the efficiency of our energy use toward the achievement of our five-year targets. The amount of waste transfer recorded was 223.6 tons, a 16.2-ton (7.8%) increase compared with the previous fiscal year. We will advance improvements in production processes and the introduction of recovery equipment, while continuing to make efforts to reduce the emissions/discharge of PRTR substances into the environment.

Targets and Performance in Fiscal 2019

Evaluation A: Significant result	B: Result in line with the target	C: Target remains unachieved
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Target parameter	Management items	Activity targets	Performance in fiscal 2019	Evaluation
Proper management of chemical substances	PRTR Regulation-designated substances	Emission reduction of PRTR Regulation-designated substances	0.4% increase compared with fiscal 2018	С

Changes in Emissions of PRTR Regulation-Designated Substances



Notes: 1. The numerical values show the total amount for DKS and Yokkaichi Chemical.

2. For the emission and transfer amount of notification substances under the PRTR Regulation in fiscal 2019 (among all notification coverage substances, those of which the emission or transfer amount was 0.01 tons or more), please visit our website. https://www.dks-web.co.jp/engilsi/Vir/eport/index.html

Reducing Emissions of Environmental Impact Substances

Air Pollution Prevention

Compared with the previous fiscal year, the Group's air-pollutant emissions in fiscal 2019 showed rises of 17.7% and 34.1% for SOx and NOx, respectively, while dust emissions fell 22.8%. We will move ahead with facility improvements and studies of operational methods with the aim of making further energy-efficiency enhancements.

Water Pollution Prevention

In fiscal 2019, the Group recorded 3,952,000 cubic meters in the amount of water discharge, a 5.4% decrease compared with the previous year, and 19.1 tons of COD emissions, a year-on-year decrease of 30.2%. We will continue to make efforts to reduce the water discharge and COD emission amounts by, for example, conducting reviews of our production processes and optimizing the operation methods at our effluent treatment facilities.

Targets and Performance in Fiscal 2019

Evaluation A: Significant result B: Result in line with the target C: Target remains unachieved

Target parameter	Management items	Activity targets	Performance in fiscal 2019	Evaluation
	SOx emissions		Up 17.7% YoY	С
Deduction of onvironmental impact	NOx emissions	Emission/discharge reduction of environmental pollutants in the air	Up 34.1% YoY	С
substance emissions	Reduction of environmental impact Dust emissions		Down 22.8% YoY	A
	Water discharge	Emission/discharge reduction of environmental pollutants in water	Down 5.4% YoY	В
	COD emissions	Emission discharge reduction of environmental polititation in water	Down 30.2% YoY	A

Changes in SOx, NOx and Dust Emissions

(Yokkaichi, Ohgata, Shiga)



ate SOx, NOx

Waste Reduction

The amount of waste generated by the Group in fiscal 2019 amounted to 19,401 tons, a decrease of 2,257 tons compared with the previous fiscal year. The waste generation per unit for DKS on a non-consolidated basis improved 1.0% (decreased) compared with the previous fiscal year, achieving our target. The recycling rate was 89.7%, which marked a 0.8-percentage-point worsening (decrease) compared with the previous fiscal year. The final disposal amount was

Changes in Water Discharge and COD Emission Amounts (Yokkaichi, Ohgata, Shiga, Yokkaichi Chemical)



948 tons, a decrease of 96 tons compared with the previous fiscal year. One contributory factor was that part of the sludge generated at the wastewater treatment facility is being recycled. The final disposal rate was 4.9%, a worsening (an increase) of 0.1 percentage point compared with the previous fiscal year. In the year ahead, we will move ahead with a review of our sludge recycling and work to reduce the final disposal amount.

Targets and Performance in Fiscal 2019

Evaluation A: Significant result B: Result in line with the target C: Target remains unachieved

Target parameter	Management items	Activity targets	Performance in fiscal 2019	Evaluation
Deduction of wests	Waste generation per unit	1% improvement in the fiscal year rate of non-consolidated DKS	Down 8.3% YoY	В
neuction of waste	Final disposal rate	3.4% or less in fiscal 2019	4.9%	С

Changes in Generated Waste Amount, External Recycling Amount and External Recycling Rate (Yokkaichi, Ohgata, Shiga, Kyoto, domestic subsidiaries)



Changes in Final Disposal Amount and Final Disposal Rate (Yokkaichi, Ohgata, Shiga, Kyoto, domestic subsidiaries)

📶 🛛 Final disposal amount Final disposal rate 5.9 (t) (%) 1.145 1,200 6.0 1.044 4.9 900 948 4.5 600 3.0 1.4 300 1.5 2019 0 2015 2016 2017 2018 (FY) 0 Note: The final disposal rate is the ratio of the final disposal amount to the generated waste amount



DKS has established an appropriate corporate governance system for sustainable growth and improvement of corporate value over the medium to long term and strives to ensure thorough compliance and risk management. Even if the organization becomes exposed to various changes in the outside environment and risks, to achieve sustainable growth and social contributions DKS aims to be an organization that is conscious of resilience and flexibility in addition to sustainability and growth.

Corporate Governance

Basic Concept

DKS engages in business based on our Company Credo, "Contributing to the nation and society through industry," along with our three Company Mottoes—"Quality First," "Cost Reduction" and "R&D Efforts"—which embody our founders' spirit. Aiming to establish a management foundation able to earn and maintain the trust of society, as well as to conduct transparent and fair corporate activities that are rooted in corporate social responsibility (CSR), we pursue higher governance as management policy and position it as one of our most important tasks. To realize these goals, DKS established a basic policy for its internal control system, which is revised as necessary.

Organizational Design and Structure



Detailed corporate governance information >> Securities Report https://www.dks-web.co.jp/ir/img/annual_security_report_2020_3.pdf (Japanese only)

Management Committee

Chaired by the Chairman CEO and composed of six Company directors, two full-time corporate auditors, two senior executive officers and two executive officers, the Management Committee meets prior to Board of Directors meetings and is divided into a management meeting to discuss management issues and a finance meeting to discuss finance issues. In the fiscal year under review, 7 management meetings and 12 finance meetings were held to ensure careful and quick decision-making.

Status of Response to Corporate Governance Code

Regarding compliance with the Corporate Governance Code, we have not implemented the 10 Principles. Please refer to our Corporate Governance Report for the principles and reasons for non-implementation.

Detailed corporate governance information >>> https://www2.tse.or.jp/disc/44610/140120200615444718.pdf (Japanese only)

Board of Directors Diversity

Company directors possess knowledge and experience in various fields such as sales, production, research, purchasing and logistics, planning, accounting and finance, and personnel and general affairs, as well as overseas management experience. Outside directors come from life insurance companies, manufacturing companies in different industries and administrative agencies related to labor conditions and occupational health and safety. At present, the Board of Directors is not sufficiently diverse in many ways, including gender, but in the future, if such a person is recognized as qualified, he or she will be appointed as a member of the Board of Directors.

Overall Efficacy of the Board of Directors

Every year, all directors and corporate auditors conduct self-evaluations based on a questionnaire prepared by the Board of Directors secretariat (President's Office Secretary Group). This questionnaire is compiled by the Board of Directors secretariat (President's Office Secretary Group), then analyzed and evaluated by outside officers and full-time corporate officers. As a result, last fiscal year, outside officers and full-time corporate auditors assessed the effectiveness of the Board of Directors as being generally appropriate and determined that effectiveness is ensured, while also receiving opinions regarding further improvements to the efficacy of the Board of Directors. Considering these recommendations, we will continue to improve the efficacy of the Board of Directors.

Executive Remuneration

The basic policy regarding executive and auditor remuneration involves a) appropriate compensation for execution of duties, b) remuneration that encourages actions to improve business performance and maximize corporate value and c) remuneration that deepens value sharing with shareholders.

Director Remuneration

Director remuneration consists of 1) fixed remuneration, 2) performance-linked remuneration (incentives) and 3) stock remuneration (deepens value sharing with shareholders). For outside directors, in consideration of involvement in business execution decisions, compensation consists of 1) fixed remuneration and 3) stock remuneration.

	1) Fixed remuneration	2) Performance-linked remuneration	3) Stock remuneration
Calculation method	Monthly remuneration is set based on the size of the role tasked to each director and his or her position.	Company performance in the previous fiscal year is evaluated once each year, with the departments each director is in charge of evaluated twice each year; then the amount of compensation is calculated and increased or decreased within a certain range.	DKS introduced a transfer-restricted stock compensation system, with decisions as to the specific allocation of monetary compensation to be paid for the granting of transfer-restricted shares based on the size of the role tasked to each director and their position.
Scope of amount	At the General Meeting of Shareholders held on June 26, 2018, a resolution determined that monthly remuneration for directors be set at ¥30 million (¥360 million per annum, with outside director remuneration set at ¥3 million per month). This does not include the salary of employees who concurrently serve as directors.		At the General Meeting of Shareholders held on June 27, 2017, a resolution determined the amount of stock remuneration be set at ¥100 million per annum (¥6 million or less per annum for outside directors; this does not include the salary of employees who concurrently serve as directors), with 100,000 shares as the maximum number of common shares to be issued or disposed of per annum. All of the above are drawn up by the CEO remitted and paid upon resolution by the Board of Directors.

Audit & Supervisory Board Member Remuneration

Audit & Supervisory Board Member remuneration is composed of 1) fixed remuneration and 2) stock remuneration based on the appropriateness of audits conducted and the role played in promoting shareholder interests.

	1) Fixed remuneration	2) Stock remuneration
Calculation method	An amount suitable for the role of an Audit & Supervisory Board Member entrusted by shareholders is set and paid as fixed monthly remuneration.	Regarding stock remuneration, DKS introduced a transfer-restricted stock compensation system, and determines the amount of monetary compensation to be paid for granting transfer-restricted shares suitable for the role of an auditor entrusted by shareholders.
Scope of amount	At the General Meeting of Shareholders held on June 29, 2005, a resolution set maximum compensation at ¥6 million per month (¥72 million per annum).	At the General Meeting of Shareholders held on June 27, 2017, a resolution set maximum stock compensation at ¥20 million per annum, with 20,000 shares as the total number of common shares of the Company to be issued or disposed of per annum. All the above are determined and remitted after consultation with Audit & Supervisory Board Members.

Total Amount of Remuneration for Each Officer Position, Total Amount of Remuneration by Remuneration Type and Number of Applicable Officers

	Total remuneration (Millions of yen)	Total remuneration by type (Millions of yen)			Number of applicable
Officer position		Fixed	Performance-linked	Stock-based	executives (persons)
Director (excluding outside directors)	282	190	67	25	10
Audit & Supervisory Board Member (excluding outside Audit & Supervisory Board Members)	43	39	_	3	2
Outside officers	32	30	_	2	6

Targets for indicators related to performance-linked remuneration in the fiscal year under review were to exceed consolidated net sales of ¥56.9 billion, consolidated ordinary income of ¥4.7 billion and consolidated operating cash flow above ¥5 billion in fiscal 2018. In the

Significant Portion of Salary Paid to Executive Directors Who Concurrently Serve as Employees

Total (Millions of yen)	Number of executives (persons)	Details	
66	6	Salary as employees	

previous fiscal year, which the performance-linked remuneration for the current fiscal year is subject to, consolidated sales increased to ¥59.5 billion and consolidated ordinary income decreased to ¥4.1 billion. In addition, consolidated operating cash flow decreased by ¥3.2 billion.

Appointment and Dismissal of CEO and Succession Plan

Regarding the appointment of the CEO, the outgoing CEO proposes a candidate for successor that is resolved after thorough deliberation by the Board of Directors, which includes two independent outside directors. If the CEO is not sufficiently fulfilling his role, or if there is a reason to dismiss the CEO's position, the Board of Directors will deliberate and resolve the dismissal of the CEO.

In addition, succession planning for the CEO is the most important matter for the survival of the Company, thus it is critical to identify

actual and potential capabilities of management. The succession plan is the exclusive property of the CEO, who is familiar with all aspects of the Company. DKS believes it is desirable to hear the opinions of outside officers regarding the qualities and aptitude of successors, thus we established and operate a successor training committee with outside officers as members.

Important Issue 5 Organizational Resilience



Compliance

Basic Concept

Since the Compliance Control Committee was established in 2004, the Company has been continuously engaged in the building and maintenance of our compliance system, as well as in activities to instill compliance practices in our employees. Recognizing that compliance activities are indispensable for continuing as a sound company, we will further strengthen our activities in the years to come.

Corporate Philosophy

The corporate philosophy around which the Company forms the basis of its actions is indicated in our Company Credo, Company Mottoes and Code of Corporate Ethics. These are also outlined in our Declaration of Action by Board Members and Employees. We post these in-house so that all employees can always act with them in mind, and we provide a pocket-sized Corporate Philosophy Handbook to all Company employees. The Company also conducts e-learning activities explaining our philosophy, with tests given to confirm understanding.

Code of Corporate Ethics

To establish corporate ethics that contribute to putting the Company policies into practice, we established a six-item set of principles as the Code of Corporate Ethics and adhere to the word and spirit of all laws and regulations, as well as international rules. We also respect the culture and customs of each country and region where we conduct

our business activities and declare that we will act with social common sense.

Declaration of Action by Board Members and Employees

Regarding the six-item set of principles established as the Code of Corporate Ethics, we broke down the content as to what kind of behavior is actually required, clearly state the guidelines for the actions of executives and employees (including seconded and contract

employees, as well as temporary employees) and declare that these guidelines will be implemented as a code of conduct.



"DKS Corporate Philosophy Handbook"

Compliance in Practice

Compliance Control Committee

The Compliance Control Committee is charged with establishing and maintaining the Company's compliance system. Since its establishment in 2004, the Compliance Control Committee has been continuously engaged in building the compliance system, implementing educational activities to entrench compliance practices in our employees and conducting surveys to ensure understanding of the compliance system.

Corporate Ethics Month

The Compliance Control Committee has designated October every year to be Corporate Ethics Month and conducts activities during the month, including educational activities and the dissemination of information, centered on a particular theme. The theme for the fiscal year ended March 31, 2019, was "What Is Compliance? A Return to the Basics" aimed at reaffirming basic information and information handling rules. In addition, as part of this activity, we requested reports on business conducted in each department aimed at organizing laws and regulations to deepen understanding and called for them to be reaffirmed within each department.

Whistleblower Hotlines

DKS has established whistleblower hotlines where employees can consult on and report possible violations to established laws and regulations. While the Company already had an internal hotline, DKS in 2016 established an external hotline as well, with instructions on use distributed internally, including through the Company intranet.

Compliance Awareness Survey

We conduct a Compliance Awareness Survey for all employees each December with the aim of accurately understanding the effects from activities aimed at further instilling compliance practices. Based on employee awareness of key issues, we use the results to determine initiatives for next year. The fiscal year ended March 31, 2020, was the 15th consecutive year the Company has implemented the Awareness Survey. This year, we confirmed the awareness of compliance with laws and regulations and Company regulations on which we placed particular emphasis during Corporate Ethics Month, confirming that awareness of Company regulations has increased more than 10% compared to the previous fiscal year. The survey posed questions about areas of policy that, in the future, we would like to see reflect current conditions, with many requests made regarding workplace environments working from home. Based on these results, we will continue to raise awareness of compliance and strengthen compliance activities.

Requested Areas for the Implementation of Measures in Fiscal 2019



Risk Management (Risks and Responses to Them)

Basic Concept

Diverse and becoming more complex, the corporate risks surrounding the Company could result in increased adverse impacts on the Company itself, as well as on employees, shareholders, customers and local communities. We position risk management as an important management issue and are taking steps to prevent potential risks and prevent the spread of risks that have already manifested.

Risk Management

To address Group risk and systematically promote activities, we have established a Risk Management Control Committee that meets on a regular basis and is composed of representatives of each department, with an operating officer serving as the chairperson.

With a focus on developing and standardizing the risk management system, the Committee manages risk by determining action plans and reviewing results, identifying potential risks and considering countermeasures.

In Japan and overseas, the Company and its subsidiaries are working to operate and maintain crisis management systems on a daily basis so that we can communicate risk crisis information as soon as possible, ascertain the situation and take appropriate measures. To deal with potential and/ or evident risks, we have taken several steps, including establishing and maintaining Risk Management Procedures, Product Liability (PL) Prevention and Management Procedures and Information Security Rules.

Major initiatives implemented in the fiscal year ended March 31, 2020, included the extraction of risks and implementation of countermeasures in each department, the implementation of measures to prevent information leakages and notifications to overseas travelers through groupware calling attention to these leaks.

We believe it is important for employees to understand concepts such as "risk management," "crisis management" and "business continuity management" (focusing on responding to interruptions in business) and to view the establishment of activities entrenching these concepts as vitally important.

As a result of the above, in fiscal 2019 we conducted e-learning on "risk management" and "business continuity management" for all managers in an attempt to acquire knowledge and reaffirm the importance of these efforts.

Business Continuity Plan (BCP) and Disaster Countermeasures

BCP is an abbreviation for Business Continuity Plan, which allows a company to maintain critical operations without suspending plans when it is affected by an unforeseen natural disaster such as an earthquake. Even if business activities are unavoidably interrupted, the BCP focuses on restarting important functions within the recovery time objective and minimizing the risks involved in interrupted operations.

We have created a BCP for a large-scale earthquake and the outbreak of a highly virulent H1N1-type influenza. We also have created a BCP for logistics operations in the event of an earthquake or torrential rain. We are regularly reviewing and updating our BCPs.

Disaster Preparedness

In the event of a crisis, our Risk Management Manual establishes management levels in line with the crisis, with the person in charge in line with those risk management levels tasked with implementing risk management.

Understanding risk possibilities under normal operation
Risks to be coped with within plants, branches, offices and subsidiaries
Risks to be coped with within divisions (including subsidiaries)
Risks to be coped with Company-wide
Unexpected risks

We are taking appropriate measures and enhancing the management of risks that interfere with the supply of products. Our annual preparation for natural disasters also includes training on understanding and reporting the safety situations of employees and damage conditions, as well as ways to improve disaster response and employee awareness.

We will continue to promote appropriate business continuity management based on protecting human life and safety, continuing operations and meeting social responsibilities.

Business Continuity Plan (BCP) Outline



Source: Cabinet Office, Business Continuity Guidelines, Third Edition

Information Security

Through the optimization of infrastructure and the ensuring of security, we provide high-quality services protecting against disasters and cyberattacks, while simultaneously promoting robust and sustainable industrialization and the expansion of technological innovation.

Within the Company, we are creating a system ensuring information security by established information security policies, countermeasure standards and implementation procedures. Recognizing the importance of the internal control system, the Internal Audit Department conducts internal audits while independent auditors conduct outside audits.

DKS REPORT 2020

Interview with an Outside Director



Director (outside)

The importance of outside directors is increasing yearly, as they work to ensure transparent, fair and objective decision-making.

We invited AOKI Sunao to share his thoughts about the effectiveness of DKS's corporate governance as well as its growth strategy and potential.

Impressions of DKS from an Outside Perspective

To start, please tell us your honest impression of DKS's positives, negatives and overall atmosphere.

I was appointed as an outside director because of my association with Chairman SAKAMOTO Takashi. DKS has a comfortable work environment with employees who are dedicated and diligent. On the other hand, the Company somewhat lacks a sense of speed, and I feel this is an area where further improvement is needed.

DKS is a manufacturer of chemical intermediary materials. DKS and Mitsubishi Heavy Industries, where I used to work, are both manufacturers, but they have different business models and product lines. From a manufacturing perspective, however, the processes remain the same: procuring raw materials, processing at the factory, assembly and shipment. I see many areas from a process perspective where DKS still has room for improvement. I believe DKS can become even more profitable by making such improvements. I focus more on older factories than newer ones because increasing the productivity of aging facilities tends to lift profits once equipment depreciation ends. Following my appointment as an outside director, I toured every factory, paying close attention to areas ranging from 5S activities (Sorting, Setting-in-Order, Shining, Standardizing and Sustaining the Discipline) to the status of inventories. Determining how 5S activities are conducted shines a light on how factories are being managed. I believe improving management at these facilities can boost profits even further. The Production HQ now oversees factory operations because of organizational changes that began in the current fiscal year, and I therefore anticipate rapid improvements in factory management.

What is your impression of DKS's sales activities?

I feel that DKS needs to brush up its customer-oriented sales activities even further. Companies that primarily engage in BtoB sales generally have plenty of room to improve from a customer's perspective. Such companies need to closely monitor BtoB sales targets after investigating both markets and customers. DKS should extend its customer-oriented marketing approach even further.

Customers often visit factories in advance to determine whether they should place orders there. In so doing, factories become a form of advertising, serving as a showcase. In addition, clients will likely write reports after touring DKS factories, so the Company should upgrade its facilities and interaction based on the impression it gives to customers.

I have high hopes for the FELIZ 115 medium-term management plan as I have heard that it introduced a new DKS sales organization to enhance marketing capabilities.

DKS's Growth Strategies

Q

What does DKS need to do to realize sustainable growth? Also, what future vision should be adopted for the next hundred years?

DKS has been in business for a century or longer because society required so. Companies that are neither valued nor needed by society are doomed to disappear. I hear that DKS reformed its business structure and overcame hard times. Corporate growth regardless of business size is possible by understanding customer needs and issues, and then providing optimal solutions more quickly than competitors.

Companies unwilling to try new things will not develop or survive. It is critical to cultivate a corporate culture that aggressively pursues new businesses without fear of failure. Making it clear that the entire management team is responsible for new business activities should generate greater momentum.

With the spread of globalism, DKS needs to become a company that thoroughly pursues customer-oriented businesses worldwide with an eye to the future. DKS also needs to develop a corporate culture that welcomes diversity regardless of race, gender or religion and a love for innovation. Beyond this, DKS needs a management team that can effectively lift earnings and maintain employee motivation.

DKS's Corporate Governance

Please describe your fundamental concepts for corporate governance.

In principle, corporate governance involves making and actually implementing decisions. Problems arise when companies stray from this principle. Issues observed at laboratories, factories and sales offices in Japan are caused by management that simply sets numerical targets at meetings and then makes employees solely responsible for achieving them. While holding meetings to make important decisions is necessary, front-line employees are tasked with producing results. It is a waste of time to opt for business plans that cannot be implemented. In other words, management establishing specific methods for implementing plans on-site is the first step to producing results.

It is dangerous to simply impose numerical targets on workplaces. It is worth noting that major problems which occurred at large corporations were triggered by falsified reports issued by front-line employees to show that numerical targets were being achieved. Simply stated, it is important for management to clarify what is required of on-site employees to reach such targets. Every level of management should make clear decisions on-site regarding who should do what and when and make sure they are done. In addition, I think clarifying where responsibility lies is a fundamental aspect of corporate governance.

At the same time, expectations have increased recently for outside directors to perform auditing duties. DKS has enhanced corporate governance by ensuring that one-third of the Board consists of outside directors. Moreover, I feel that the Board of Directors engages in meaningful deliberations given that director duties are separated into areas such as manufacturing, finance and labor.

FELIZ 115 and the Future of DKS

Q

What kind of advice did you provide during the formulation of FELIZ 115?

I met with management on several occasions to determine the seven key initiatives for realizing FELIZ 115. All these initiatives target the creation of a high-margin Uni-Top company. This includes withdrawing from unprofitable businesses and adopting an HR system that uses performance evaluations to enhance earnings.

Furthermore, the Company needs to promote data-based management as part of these initiatives. Holding discussions based on data should accelerate decision-making. DKS needs to determine customer needs and challenges and connect them to actual businesses by sharing this data with each division more rapidly as it pursues its Uni-Top strategy.

Q

What themes will be important going forward?

ESG management is an important policy. Implementing ESG requires first increasing earnings. "Environmental" and "social" aspects must remain in balance with the Company's profitability. In other words, the Company must prepare the resources needed to execute ESG-based management.

As for governance, succession planning is a key theme. How to develop future managers and leaders is a difficult issue, with leadership development planning being particularly challenging. I see benefits from selecting promising candidates, giving them experience in a variety of departments and screening them based on their performance.

In companies, making decisions is an important task that only the president can bear. The president should be selected from personnel who are capable of performing risk management and damage control based on verified data.

The FELIZ 115 medium-term management plan provides a road map for management toward 2030. These measures will enhance DKS's ability to meet the expectations of shareholders and many other stakeholders. I would like to see DKS become a Uni-Top chemical manufacturer beloved by employees, customers, shareholders and society.

DKS REPORT 2020

Board of Directors, Audit & Supervisory Board, and Executive Officers

Board of Directors (as of July 1, 2020)



SAKAMOTO Takashi Chairman CEO

Number of shares held: 31 761 shares

Career summary

- April 1970 Joined The Fuji Bank, Limited (current Mizuho Bank, Ltd.)
- February 1991 Manager of Madrid Branch of Fuji Bank Manager of Nihonbashi Branch of Fuji Bank May 1994

- Age 2001 Director of Fuji Asset Management Co., Ltd.
 June 2001 Jonead DKS Co. Ltd.
 June 2001 Director Age 2001 Director Age 2001 Director April 2004 Executive General Manager in charge of Corporate Planning Headquarters
 April 2004 Executive General Manager in charge of Corporate Planning Headquarters
 Age 2004 Amounton Director Age 2004 Amounton Director
- Excellence of the analysis of the analysi
- June June June
- June June



- April 1975 Joined DKS Co. Ltd. October
- 2007 General Manager of Financial Division and Assistant to Auditor
 2008 General Manager of Accounting Department and Assistant to Auditor
 2008 Executive General Manager in charge of Financial Headquarters May
- June
- June 2009 Director
- 2009 Director 2016 Managing Director 2020 Representative Senior Managing Director (current) April

URAYAMA Isamu

Representative Senior Managing Director

Number of shares held: 14 720 shares

Career summary April April

1991 Joined DKS Co. Ltd. 2013 General Manager in General Manager in charge of Planning Department, Yokkaichi Reorganization Division, Production Control Headquarters

YAMAJI

Managing Director

Administrative Supervisor

Number of shares held:

4 247 shares

Naoki

- April April 2014 General Manager of COO Office 2015 Executive General Manager of Plastic Materials Business Division, Business
 - Headquarters
- 2016
- April April June April April April 2017 2017
- 2018
- Headquarters Concurrently in charge of Tokyo Headquarters Executive General Manager in charge of Corporate Planning Headquarters Director and in charge of Personnel & General Affairs Headquarters in charge of Production Control Headquarters Concurrently General Manager of Formulation Development Promotion Office Managing Director (current) 2019 2020



ΟΚΑΜΟΤΟ

Osami Managing Director Sales Supervisor in Charge of Tokyo Headquarters

Number of shares held: 6,860 shares

Career summary

April	1989	Joined DKS Co. Ltd.
April	2006	General Manager of Sales Department, Plastic Additive Materials Business
		Division
May	2007	General Manager of East Sales Department, Surfactants Business Division
April	2008	General Manager of Planning Office, Functional Chemicals Business Division
October	2010	Director of Yokkaichi Chemical Co., Ltd.
April	2013	General Manager of Yokkaichi Reorganization Department, Production Control
		Headquarters
April	2014	General Manager in charge of Management Planning Office, Corporate Planning
		Headquarters
April	2016	Deputy Executive General Manager in charge of Corporate Planning
		Headquarters
April	2017	Executive General Manager of Plastic Materials Business Division, Business
		Headquarters
		Concurrently in charge of Tokyo Headquarters (current)
June	2017	Director
December	2018	Concurrently General Manager of Plastic Materials Sales Department
April	2020	Managing Director (current)
		Sales Supervisor (current)



Director (outside)

Number of shares held: 648 shares

Career summary

- April June

- April
 1972

 June
 2000

 June
 2003

 January
 2005

 June
 2005

 June
 2005

 June
 2005

 April
 2006
- Summary
 Summary
 1972 Joine Mitsubishi Heavy Industries, Ltd.
 2000 Director of Takasago Laboratory, Technology Department
 2005 Beneral Manager, Technology Department
 2005 Represent Manager, Technology Department
 2005 Visiting Professor of Taisphus University in China (current)
 2006 Representative Kanaging Executive Officer of Mitsubishi Heavy Industries, Ltd.
 2007 Executive Officer Of Mitsubishi Research Institute, Inc.
 2014 Device In Director of Mitsubishi Research Institute, Inc.
 2014 Device Internet Manager Inc. April June
- April 2014 Special Advisor of Mitsubishi Heavy Industries, Ltd. 2014 Director of DKS Co. Ltd. (current)



Career summary

October April

June

- April April April April April June
- Summary

 1978
 Labor Standard Inspector of Labor Ministry

 1978
 Labor Standards Inspection Office, Kyoto Labor Bureau, Ministry of Health, Labor and Welfare (former Labor Department)

 2004
 Senior Office for Personnel Planning, General Afrika's Division

 2008
 Direct of the General Africa Townian ILabor Standards Inspection Office

 2010
 Direct or the General Africa Townian

 2011
 Chief of the Kyoto-Hamin Labor Standards Inspection Office

 2012
 Chief of the Kyoto-Hami Labor Standards Inspection Office

 2014
 Executive Director of Kyoto Labor Standards Inspection Office

 2015
 Executive Director of Kyoto Labor Standards Inspection Office

 2016
 Executive Director of Kyoto Labor Standards Inspection Office

 2017
 Registered as Labor and Social Secutivy Attorney Kyoto Labor Standards Inspection Office

 2014
 Executive Director of Kyoto Labor Standards Inspection Office

 2015
 Executive Director of Kyoto Labor Standards Inspection Office

 2016
 Office (Director)

 2017
 Englistered as Labor and Social Secutive Attorney Standards Inspection Office

 2018
 Office (Director)

 2019
 Office (Labornal Tonguchi Labor and Social Secutive Attorey Stan
 - Attorney's Office (current) Director of DKS Co. Ltd. (current)



KAWAMURA Ichiji

Director Production Supervisor

Number of shares held: 2,245 shares

April	1985	Joined The Fuji Bank, Limited (current Mizuho Bank, Ltd.)
August	1995	Senior Assistant to Director of London Branch
November	2001	General Manager of Yokohama Branch
April	2002	Assistant Branch Manager, Yokohama-chuo Branch of Mizuho Bank
May	2004	Assistant Branch Manager, Seoul Branch of Mizuho Corporate Bank, Ltd.
July	2008	Deputy General Manager of Sales Department 6
April	2011	General Manager, International Corporate Sales Department
July	2013	General Manager, International Corporate Sales Department of Mizuho Bank
April	2016	Joined DKS Co. Ltd.
		Deputy Executive General Manager in charge of Personnel & General Affairs
		Headquarters
April	2017	Executive General Manager in charge of Personnel & General Affairs
		Headquarters

2018 Executive General Manager in charge of Production Control Headquarters April

ΜΙΥΑΤΑ

Yasuhiro

100 shares

Director (outside)

Number of shares held:

June April 2018 Director (current) 2020 Production Supervisor (current)



Career summary

April

- April
- April
- Suffinite Dai-Ichi Mutual Life Insurance Company (current The Dai-Ichi Life Insurance Company, Limited)
 Senior Portfolio Manager, Kogin-Daiichi Life Asset Management Company (current Asset Management One Co., Ltd.)
 General Manager of Global Fixed Income Investment Department, Dai-Ichi Mutual Life Insurance Company (current The Dai-Ichi Life Insurance Company, Limited) April
 - Limited) 2010 General Manager of Global Fixed Income Investment Department, The Dai-Ichi Life Insurance Company, Limited 2014 General Manager of Group Pension Business Unit, The Dai-Ichi Life Insurance Company, Limited 2016 Executive Officer, General Manager of Group Pension Business Unit, The Dai-Lebuttice Officer, General Manager of Group Pension Business Unit, The Dai-
- April
- April
- April
- April
- 2016 Executive Uniter, ceneral Manager of group Person Business Unit, i he Dai- thi Life Insurance Company, Limited
 2018 Executive Officer, Chief General Manager, Investment
 Concurrently General Manager of Equity Investment Department
 2019 Managing Executive Officer, Chief General Manager, Kansai Market
 Concurrently Chief General Manager, Kansai Operations Bureau, The Dai-Ichi
 Life Insurance Company, Limited (current)
 2019 Director of DKS Co. Ltd. (current)

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Director R&D Supervisor

KITADA

Akira

Career summary

- April April
- SUITIMENTY
 Jense DNS Co. Ltd.
 General Manager of Functional Chemicals R&D Department, Functional Chemicals Business Division
 General Manager of Fanning Office, Functional Chemicals Business Division, October April Business Headquarters
- 2015 Director (current) 2016 Executive General Manager in charge of Production Control Headquarters and April
- 2016 Executive General Manager in charge of Production Control Headquar in charge of Environment, Safety & Quality Assurance Department 2018 Executive General Manager in charge of Personnel & General Affairs Headquarters and President of Osaka Branch April

TANIGUCHI

Director (outside)

Number of shares held:

Tsutomu

527 shares

April 2020 R&D Supervisor (current)



Number of shares held: Career summary

Audit & Supervisory Board (as of July 1, 2020)



FUJIOKA Toshinori Audit & Supervisory Board Member

Number of shares held: 12.552 shares

Career summary

- October
 Solition of DKS Co. Ltd.

 October
 2000
 General Manager in charge of General Business Promotion Office, Procurement & Logistics Headquarters

 July
 2001
 General Manager in charge of Sales Promotion Office, Sales Headquarters

 October
 2005
 General Manager of East Supervision Department, Sales Supervision
 Headquarters Executive General Manager in charge of Personnel & General Affairs 2007 June
- April June
- 2007 Executive General Manager in Charge of Personnel & General Antars Headquarters 2010 President and Representative Director of Kyoto Elex Co., Ltd. 2011 Executive General Manager in charge of Procurement & Logistics Headquarters and President of Osaka Branch 2014 Director Director Beneral Manager of RHEOCRYSTA Business Division (Business Headquarters) 2018 Audit & Supervisory Board Member (current)
- June April
- June



NAKA Hideya

Audit & Supervisory Board Member (outside)

Number of shares held:

Career summary

April	1978	Joined The Bank of Kyoto, Ltd.
June	2001	Manager of Tanabe Branch of Bank of Kyoto
June	2003	Manager of Fushimi Branch of Bank of Kyoto
June	2005	Manager of Corporate Financial Department of Bank of Kyoto
June	2007	Executive Officer of Bank of Kyoto (Commissioned Executive General
		Manager, Hanshin Sales Headquarters, Sales Administrative Division)
December	2010	Executive Officer of Bank of Kyoto (Commissioned Chair, Nagoya Branch
		Opening Committee)
April	2011	Executive Officer of Bank of Kyoto (Commissioned General Manager,
		Nagoya Branch)
June	2013	Managing Executive Officer of Bank of Kyoto (Commissioned General
		Manager, Nagoya Branch)
June	2015	Managing Executive Officer of Bank of Kyoto (Commissioned General
		Manager, Tokyo Branch)
December	2015	Managing Executive Officer of Bank of Kyoto (Commissioned General
		Manager, Tokyo Sales Department)
June	2019	President and CEO, Kyoto Credit Assurance Service Co., Ltd. (current)
June	2020	Audit & Supervisory Board Member of DKS Co. Ltd. (current)

Executive Officers (as of July 1, 2020)

Senior Executive Officer	Executive General Manager, Sales Headquarters	MISAWA Hideto	
Senior Executive Officer	Executive General Manager, R&D Headquarters	IWAISAKO Koichi	

Executive Officer	President and CEO, Yokkaichi Chemical Co., Ltd.	HASHIMOTO Masayuki
Executive Officer	General Manager, Life Sciences Department, R&D Headquarters and President and CEO of Biococoon Laboratories, Inc.	SHUDO Takuya
Executive Officer	President and CEO, Ikeda Yakusou Co., Ltd.	MIURA Hiroyuki
Executive Officer	President and CEO, Kyoto Elex Co., Ltd.	KATAYAMA Toshihiko
Executive Officer	Executive General Manager, Production Headquarters	SHIMIZU Shinji
Executive Officer	Executive General Manager, Administrative Headquarters	SAKAMOTO Mami
Executive Officer	General Manager, Shiga Plant, Production Headquarters	SHIMIZU Koji
Executive Officer	General Manager, Yokkaichi Plant, Production Headquarters	OWAN Jiro

General Manager, Ohgata Plant, Production Headquarters MORI Yoshiyuki

NISHIZAKI Shinichi

Audit & Supervisory Board Member

Number of shares held: 6.395 shares

Career summary

- Classifier
 Science
 Science

TAKAHASHI

Toshitada Audit & Supervisory Board Member (outside)

Number of shares held:

Career summary				
April	1982	Joined The Fuji Bank, Limited (current Mizuho Bank, Ltd.)		
May	2004	Manager of Urawa Branch of Mizuho Corporate Bank, Ltd.		
November	2005	Manager of Maebashi Branch of Mizuho Corporate Bank		
April	2008	Manager of Shinagawa Branch of Mizuho Corporate Bank		
April	2010	Chief Auditor, Business Audit Department of Mizuho Corporate Bank		
January	2011	Joined UC CARD Co., Ltd.		
February	2011	Managing Executive Officer of UC CARD		
April	2020	Director, Managing Executive Officer of UC CARD		
June	2020	Audit & Supervisory Board Member of DKS Co. Ltd. (current)		

Audit & Supervisory Board Member of DKS Co. Ltd. (current) Director, Audit & Supervisory Board Member of DKS Co. Ltd. (current)



HASHIMOTO Katsumi

Audit & Supervisory Board Member (outside)

Number of shares held:

- Harry Joined Osaka Regional Taxation Bureau Joined Asahi Accounting, LLC. (current KPMG AZSA LLC) Registered as a carolfied public accountant Representative Pather of Asahi Accounting, LLC. (current KPMG AZSA LLC) Director of Kyeto Office of KPMG AZSA LLC

Executive

Officer

- 1981 1984 1987 2007 2010 2019 2019 2020
- Left KPMG AZSA Established Hashimoto Accounting Office as a Representative (current) Audit & Supervisory Board Member of DKS Co. Ltd. (current)

- DKS REPORT 2020
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Career summary April October March May July June July June

Six Operating Segments



(DKS REPORT 2020)

Promoting FELIZ 115



Managing Director & Sales Supervisor, in Charge of Tokyo Headquarters OKAMOTO Osami

The Sales Headquarters will pursue customer-oriented policies and promote inspiring/inspired partnerships to achieve FELIZ 115.

Q

What is your approach for implementing the key initiatives of FELIZ 115?

I have provided various ideas regarding four issues from the current fiscal year as the person responsible for the Sales Headquarters:
1) promote businesses expected to be sustainable, 2) identify profit-generating businesses, 3) engage in more customer-oriented sales activities and 4) enhance training for sales personnel.

The first issue, "promote businesses expected to be sustainable," refers to businesses that steadily boost long-term earnings based on stable raw materials procurement and few risks posed by chemical substance regulations. In addition, the ability to maintain stable production is important given issues associated with aging production facilities. The second issue, "identify profit-generating businesses," goes beyond just corporate profit contributions to include margin size, technological evaluations of products and whether they contribute to sustainable societal growth. The third issue, "engage in more customer-oriented sales activities," involves the long-term stable supply of products that meet customer requirements at reasonable prices. I believe sales activities undertaken by sales departments have not always been sufficient. We need to build a win-win relationship with customers by continuously pursuing customer-oriented themes over the long term and sharing them with customers. The fourth issue, "enhance training for sales personnel," involves taking necessary actions in an appropriate manner, such as emphasizing manager communication with subordinates, establishing manuals and identifying operations. We have upgraded platforms for consistently exchanging information that include digitalizing daily sales reports, but I see plenty of room for the people to use them more speedily.

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Please tell us your thoughts about inspiring/inspired partnership growth strategies.

In the inspiring/inspired partnerships, the key phrase is sustainable and mutual growth. This requires creating beneficial relationships able to generate sustainable profits and growth through a mutual understanding of technology and operating conditions. Valuing long-term business relationships, creating supplemental relationships and sincerely addressing issues will lead to the creation and enhancement of trustworthy relationships. I also feel the importance of enhancing my own sales ability as the person responsible for the Sales Headquarters to properly outline growth strategies. Sometimes, top-to-top communication is the only way to know what customers really expect of us.

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With demands being placed on companies to help create a sustainable society, please share your ideas on business expansion through SDGs and ESG.

The DKS Credo and DKS Mottoes are extremely important elements for sales and profit growth based on an awareness of the SDGs and ESG. Since joining the Company, I have always kept in mind the DKS Credo, "Contributing to the nation and society through industry," and the DKS Mottoes, "Quality First," "Cost Reduction" and "R&D Efforts," which are the cornerstones of the DKS spirit. I believe this closely imbues our SDG and ESG concepts and initiatives.

Sales departments must take actions that fully consider environmental burdens while targeting sustainable societal growth. Designing products that meet customer requirements is a matter of course, while the environment and society should be critical elements of our product design. We are searching for an approach that generates sales and profits by contributing to society while simultaneously addressing environmental and social issues throughout the production process, extending from raw materials procurement to product sales.

We aim to contribute to society and achieve sustainable growth underpinned by the DKS Credo, the DKS Mottoes, the SDGs and ESG.

Six Operating Segments

Surfactants



Segment outline

Since the Company's founding in 1909, the surfactants segment has provided core technologies that have supported DKS for more than 100 years. DKS surfactants provide high added value in a wide variety of fields and applications, including soap and detergents, IT, electronics, rubber and plastics, paints and color materials, and energy through their emulsifying, dispersing, solubilizing, penetrating, wetting, foaming and defoaming, and surface modifying functions. In recent years, we have also been promoting the development of products that are compatible with the globally increasing consideration for the environment. We currently develop and manufacture these products with petrochemicals and oils/fats as key raw materials primarily at the Yokkaichi Branch (the Chitose and Kasumi Plants), the Shiga Branch and Yokkaichi Chemical Company Limited.

A review of the fiscal year ended March 2020 and our outlook for the future

During the fiscal year ended March 2020, net sales in this segment were generally sluggish.

In Japan, there was significant growth in sales for IT and electronics applications, but sluggish sales for soap and detergent applications, paints and color material applications, rubber and plastic applications, and machinery and metal applications.

Overseas, sales were slightly weak for rubber and plastic applications and paints and color material applications but somewhat sluggish for textile applications.

Looking ahead, we will focus on providing products customized to meet customer needs in accordance with the Uni-Top strategy.

The strengths of DKS and the main functions of the business

The typical function of surfactants is to clean (i.e., dirt removal), which is represented in the well-known item "soap." Surfactants act on the surface of substances that do not mix, such as oil and water, and display emulsification and dispersion actions to remove dirt. Recently, however, the functions that the Company's customers require for surfactants have evolved beyond simply cleaning to more sophisticated and unique applications that reflect the advancement of the industry. Having developed a reactive surfactant that after demonstrating its function as a surfactant improves water resistance and other characteristics—a Japan-original indigenous technology—the Company is focusing on expanding that market.

The surfactant synthesis, analysis and evaluation technology developed over its more than 111-year history has enabled the Company to provide performance and functions tailored to customer needs through its numerous product lines and combinations.

As a Uni-Top strategy under FELIZ 115, our new medium-term management plan, we are regarding our use of finely tuned technologies to meet the performance requirements of our customers as a strength and aiming to expand sales.

Relationship between the segment and society

This segment is leveraged by the Company's many years of experience and accumulated technologies. The industrial fields in which the growth of reactive surfactants can be expected in the years to come include the paints and coatings field as well as adhesives. On the other hand, there are various competitors in this business, such as domestic manufacturers of detergents and emulsifying and dispersing agents. However, our abundant lineup of products has enabled us to introduce optimal products that meet customer needs, while we are able to conceive high-value-added products through our unique development approach. Going beyond simply providing materials, we work closely with customers to find solutions to their problems.

Amid the global rise in environmentalism, we have been pursuing in recent years research and development on highly biodegradable, ecofriendly products that do not cause water pollution.



Note: Figures have been updated to account for the addition of a new segment.

Operating Income



Note: Figures have been updated to account for the addition of a new segment

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Net Sales

Where Have We Come From, Where Are We Going?

How Should We Manage?

Data Section

Amenity Materials



Segment outline

The Amenity Materials segment provides materials and peripheral application technologies necessary for a comfortable living environment. The Company provides materials suitable to the products of customers in a wide range of industries including foods, pharmaceuticals, cosmetics, toiletries, fisheries/livestock, textiles, pulp/paper, civil engineering, agrochemicals and agro-materials. In particular, products made from naturally derived raw materials, such as sucrose, fatty acids and pulp, are delivered to our way of life as safe and reliable materials.

In addition to core-technology surfactants, DKS manufactures products made from natural raw materials, including sugar and pulp, at the Ohgata and Shiga Branches.

A review of the fiscal year ended March 2020 and our outlook for the future

During the fiscal year ended March 2020, net sales in this segment were generally somewhat weak.

In Japan, sucrose fatty acid esters (SEs) performed well in food applications, but vinyl polymers performed somewhat sluggishly in rubber and plastic applications. Sales of cellulose polymers were robust for agricultural and agrochemical applications and favorable for pulp and paper industry applications.

Overseas, sales of SEs were favorable for food applications but slightly weak for cosmetics applications.

Looking ahead to the overseas market in the years to come, we will aim to improve comfort in people's daily lives by providing highly functional products while working to cultivate customers.

The strengths of DKS and the main functions of the business

With more than 65 years of experience in cellulose polymers using pulp and more than 50 years of experience in SEs using sugar, the Company has a long history in product development and is developing markets based on the basic and application technologies accumulated to date. Among these, SEs are highly characteristic as an edible surfactant and DKS is one of only a handful of companies worldwide producing them.

SEs are used as an emulsifier for oil/fat and cream and as a texture modifier, for example, in cookies and snack foods. Recently, we finely divided naturally derived cellulose fibers using nanotechnology and established technologies to produce a new material called cellulose nanofiber (CNF). Leveraging its characteristic viscosity and emulsifying, dispersing and stabilizing properties, CNF is a noteworthy material that can be used in personal care and general industrial applications.

Relationship between the segment and society

This segment targets industrial fields that place an emphasis on safety, such as food, personal care products and pharmaceuticals, as end products that are placed in the mouth, come into contact with skin and stimulate the five senses. Demographic trends indicate that major Japanese market growth looks unlikely.

However, while maintaining its current customer base, the Company will strive to secure stable sales and profitability in Japan. As growth fields, we will also aim to expand sales of products centered on, for example, overseas food and cosmetics applications.



Operating Income



Note: Figures have been updated to account for the addition of a new segment

Six Operating Segments

Polyurethane Materials



Segment outline

The segment provides polyurethane materials and industrial materials, including paints, adhesives, civil engineering and construction materials and electric insulation materials. The Company possesses technologies used to manufacture high-elasticity urethane rubber and urethane elastomers as well as soft/rigid urethane foams. The Company leverages these properties to provide a variety of high-performance urethane products for a wide array of industries and applications that include cushioning, thermal insulation, molding and painting materials. Rock hardening agents used for mountain tunnel projects such as roads and railways are an essential product for infrastructure upgrading.

The Company's products play a role in maintaining safety in environments where one misstep can put people's lives in jeopardy. With petrochemicals as the mainstay raw materials in the segment, the products are mainly manufactured at the Yokkaichi Branch (the Chitose and Kasumi Plants).

A review of the fiscal year ended March 2020 and our outlook for the future

During the fiscal year ended March 2020, net sales for this segment were generally sluggish.

Sales of civil engineering chemicals were strong, but sales of ecofriendly synthetic lubricants in line with HFC regulations and materials for civil engineering and construction fell sharply.

Rock hardening agent sales are expected to grow as construction for the Linear Chuo Shinkansen project proceeds.

The strengths of DKS and the main functions of the business

The Company's urethane materials are used mainly in paints, adhesives, civil engineering and construction and electric insulation materials, with the overriding priority of ensuring people's safety through applications mainly for transportation equipment, civil engineering projects and electronic materials. With the recent diversification of electric appliances and the incorporation of IT in automobiles, electronic components are being used under increasingly severe conditions. Meanwhile, the need for lightweight, compact and integrated electronic components has increased, while components now need to be protected from physical and chemical effects to maintain strength and ensure durability. Lightweight, strong urethane resin plays a key role in this area. The Company's electric insulation materials, which feature a superior balance of insulation, heat-resistant and flame-retardant properties, have a wide range of uses, from home appliance to transportation equipment components, to meet the exacting needs of customers.

In addition, our rock hardening agents for tunnel construction have a broad array of uses that include public roads and railways while boasting a high market share based on their safety and performance.

We will conduct employee training at the safety training center located at the Kasumi Plant, where these products are manufactured, with the aim of generating Group-wide synergies.

Relationship between the segment and society

After construction had proceeded as planned, the Kasumi Plant located in Yokkaichi, Mie Prefecture, began operations in December 2015 and serves as a mother plant that accounts for one-third of the 100,000-m² site area. The rock hardening agents manufactured at Plant #1 are indispensable materials for tunnel construction, including roads and railways. These products are contributing to infrastructure projects that make people's lives more convenient.

Plant #3, which manufactures functional polyurethane resin, commenced operations in December 2019. Against this backdrop, we will redouble our initiatives with inspiring/inspired partners.

Based on our Uni-Top strategy, we will pursue the development of materials by combining cutting-edge facilities and application technologies that meet customer needs and are in tune with the times.



Note: Figures have been updated to account for the addition of a new segment.

Operating Income





Where Have We Come From, Where Are We Going?

Functional Materials



Segment outline

The functional materials segment provides technologies and materials contributing to advanced performance, including resins used in daily necessities, as well as IT and electronic materials often used in personal computers, smartphones and home electronics. Some of the segment's products include plastic flame retardants, antistatic agents, lubricants, anticlouding agents to reduce film and resin clouding, antioxidants suppressing oxidation degradation in a variety of materials, and radiation-curable monomers and oligomers using radcure (UVor EB-curing) technology. The waterborne polyurethanes being developed since 1973 are used in wood and plastic paints, metal and paper coating agents, film and wood adhesives, and paper/fiber binding.

These products are manufactured at the Yokkaichi Branch (the Chitose and Kasumi Plants) and the Ohgata Branch.

A review of the fiscal year ended March 2020 and our outlook for the future

During the fiscal year ended March 2020, the Functional Materials segment generally saw notable growth in net sales.

In Japan, there was strong growth in the brominated flame retardants used in rubber and plastics applications and notable growth in radiationcurable monomers and oligomers for IT and electronics applications.

Overseas, there was a sharp fall in sales of the brominated flame retardants used in rubber and plastics applications but notable growth in radiation-curable monomers and oligomers for IT and electronics applications.

The expansion in radiation-curable monomers and oligomers represents a success story in our cooperation with our inspiring/inspired partners.

The strengths of DKS and the main functions of the business

The technology used in radiation-curable monomers and oligomers is called radcure technology, in which a resin composition such as paint is instantaneously dried and cured by irradiating it with ultraviolet light (UV) or an electron beam (EB). Radcure technology is widely used in several applications across a variety of fields to conserve resources and energy and to reduce environmental impact. Applications include the clear paint used in building materials and furniture; anticorrosive paint for metals; resist materials for semiconductors, dry films and LCDs; and coating agents for mobile phones, optical fibers, plastics and paper. DKS monomers are highly functional alcohol-based products using ethylene oxide (EO) addition technology, which results in low curl, low viscosity and enhanced hardness. Our BtoBtoC business model focuses on a cooperative relationship



Relationship between the segment and society

While many urethane resins are based on organic solvents, DKS is also researching and developing waterborne polyurethanes, in which the polyurethanes are dispersed in water, largely in reaction to rapidly growing demand for safer water systems as society places increased importance on environmental concerns. In addition to being safe for the environment and people, we believe these products are likely to see increased demand thanks to their ability to allow high-performance finishing in a variety of applications, including paper and metal processing, as well as film processability. Given the global trend away from organic solvents, this is a product group on which we are focusing our energies.

The target markets for this business show a strong potential for growth and are in areas both in Japan and overseas in which DKS can demonstrate its strengths. While competitors include electronic materials manufacturers and overseas flame-retardant manufacturers, the Company looks to secure growth through its innovative technologies and proposal capabilities.

Construction of a new plant for radiation-curable monomers and oligomers has been completed in June 2020, and it commenced commercial production in September 2020.





Net Sales



Note: Figures have been updated to account for the addition of a new segment.

Six Operating Segments

Electronic Device Materials



Segment outline

As the information society continues to advance, as evidenced by the rapid spread of the Internet and smartphones, the electronic device materials segment is focused on developing and supplying ion-conductive polymers, ionic liquids, ceramic materials and lithium-ion battery materials, as well as conductive pastes for solar cells.

In 2018, we dissolved Elexcel Corporation and moved the former company's operations to the R&D Headquarters, with a corresponding shift to an organizational system specializing in the research and development of lithium-ion battery materials. We intend to further develop our innovative technologies in each area of operation, while also promoting R&D in line with the trends of the times. Mainstay products in the electronic device materials segment are produced at subsidiary companies Kyoto Elex and Dai-ichi Ceramo.

A review of the fiscal year ended March 2020 and our outlook for the future

Generally, there was significant growth in net sales in this segment in the fiscal year ended March 2020.

Sales of ionic liquids for display applications were strong, and there was significant expansion in sales of conductive pastes for solar cells.

One threat to the segment is the improvement in technological abilities in countries throughout Asia, including China. However, by developing new markets and building firm relationships with customers based on the BtoBtoC business model, we intend to offer added value that cannot be beaten by cost competitiveness alone.

The strengths of DKS and the main functions of the business

DKS is focused on advancing business activity at subsidiary companies using its innovative technologies. The Company's surface chemistry, which is its core technology, is used in the mixing techniques of resins and ceramic powders or organic materials and metal powders. DKS can conduct mixing operations under special conditions and with a high level of viscosity thanks to its detailed know-how in the process. Compound technology is one of our key strengths, allowing us to provide specific materials that meet the needs of our customers. One example is conductive pastes, which have precious metals as the main raw material and are made with inorganic fillers and soluble binders. Conductive pastes improve functionality in the electronic devices and components used in solar cells, automobiles, smartphones, LEDs, office equipment and medical equipment. Materials for ceramic and metal powder injection molding are used to produce small and difficult-to-process complex three-dimensional ceramics and metal parts. They often are used in electronic devices such as smartphones, precision components such as watches and medical equipment, and automotive and optical communication components. The segment also can provide powder injection molding compounds made by precisely mixing raw material powder, binder and dispersant.

Another one of our strengths can be found in lithium-ion batteries, where we handle everything from materials research and development to the manufacture of prototype lithium batteries.

Relationship between the segment and society

The lithium-ion batteries (LiB) used in electric vehicles generally employ lithium phosphate as an electrolyte and an organic solvent as an electrolytic solution. However, because there is a risk of organic solvents igniting, manufacturers have been careful to incorporate safety measures, including adding in flame retardants. We have developed an ionic liquid that remains in that state at 100°C and below, has no vapor pressure and is nonflammable, and because it is highly safe and has high ion conductivity, we are developing electrolyte applications for lithium-ion batteries and capacitors. These kinds of liquids are also attracting attention as next-generation materials in the energy device field and as green solvents for reducing environmental impacts. Through these products and efforts, the segment is playing an important role in making all our lives safer and more comfortable. While the improving technological capabilities of countries in Asia, including China, are a threat, we believe growth is possible by offering our proprietary technologies, R&D capabilities and solid quality.



Note: Figures have been updated to account for the addition of a new segment.







Where Have We Come From, Where Are We Going?

Data Section

Life Sciences



Segment outline

With its full-scale entry into the life sciences business in July 2018, the Company acquired two companies, Biococoon Laboratories, Inc. and Ikeda Yakusou Co., Ltd. as wholly owned subsidiaries. Advancing research and product development with a focus on natural raw materials, extraction and high concentration technologies from natural products and mass production technology, this segment supplies health food products that include an I. Japonica-Bombyx Fungus (Cordyceps sinensis) dietary supplement and Sudachin (peel extract powder made from *sudachi*, a citrus fruit). The company Biococoon Laboratories is promoting the quantification of a new substance that it is hoped will have an effect on dementia and proceeding with the search for high production conditions. Having established extraction and high concentration technologies from natural products, Ikeda Yakuso is also working to stabilize product quality and deliver products to customers with the priority being safety and reliability.

A review of the fiscal year ended March 2020 and our outlook for the future

Net sales for the year ended March 31, 2020, increased by ¥188 million year on year to ¥427 million. Sales of the I. Japonica-Bombyx Fungus dietary supplement were firm, and there was growth in sales from the contract manufacturing business, such as pharmaceutical raw materials and health food products produced by concentrating and powdering extracts from natural products.

Under the new FELIZ 115 medium-term management plan, we will concentrate management resources in this business and aim to lay the foundations for the future by creating and strengthening new businesses in conjunction with regional revitalization at an early stage.

The strengths of DKS and the main functions of the business

In December 2019, a new manufacturing plant for I. Japonica-Bombyx Fungus, which is made with only pure domestic ingredients, was completed at Biococoon Laboratories in the town of Tanagura, Fukushima Prefecture. Having acquired HACCP¹ certification, the company has further enhanced its quality control systems to manufacture and provide consumers with safe and reliable health food products. Possessing manufacturing facilities that have acquired GMP² for pharmaceuticals, lkeda Yakuso manufactures and provides safe and reliable products. The company also undertakes contract manufacturing business for products related to drug substances and foods based on high-quality powdering technologies. Also able to handle chemical products, lkeda Yakuso can

Net Sales



Note: Figures have been updated to account for the addition of a new segment

provide products with various levels of performance and functions that match customers' requests.

- HACCP (Hazard Analysis Critical Control Point): A food sanitation management method that was developed to ensure the safety of food used in the U.S. space programs in the 1960s.
- Good Manufacturing Practice (GMP): Rules and systems established to ensure that products are manufactured safely and that consistent quality is maintained in all processes, from the storage of raw materials to manufacturing and shipping.

Relationship between the segment and society

This business segment is accelerating not only the acquisition of HACCP and GMP certifications in the manufacture and sale of its health foods but also its initiatives, including industry-government-academia collaboration. Developed by making effective use of the peeled skins of *sudachi*, which is a representative and previously untapped regional resource of Tokushima Prefecture, the peel extract Sudachin arose through industry-governmentacademia collaboration with Tokushima University and Tokushima Prefecture. Currently, focusing on the anti-diabetic and anti-obesity effects of sudachitin, one of the polyphenols contained in Sudachin, we are proceeding with the development of new functional foods using Sudachin based on a regional consortium of industry, government and academia.

In addition, the newly added I. Japonica-Bombyx Fungus (Cordyceps sinensis) is a health food that has the potential to help address the rise in dementia patients, a social issue taking hold in Japan. A venture company from Iwate University, Biococoon Laboratories, is proceeding with clinical trials aimed at receiving permission to label this product as a food with functional claims. We will pursue research and development to extend people's healthy lives that reflects the spirit of the DKS Credo: "Contributing to the nation and society through industry."

Operating Income



DKS REPORT 2020

Fundamental Knowledge of Surfactants

Generally, an "interface" refers to the border area between two materials of different states of solid, liquid or gas. A surface active agent, or surfactant, is a term for a chemical that exhibits functions and improves the performance of these interfaces.

Basic Structure of Surfactants

Surfactants have a unique chemical structure that has both hydrophilic and hydrophobic properties. Using this structure, surfactants can achieve a variety of effects such as emulsification, dispersion, foaming and adsorption by weakening surface tension or forming molecular aggregates or micelles (spheres).



Surfactant Types

Surfactants have four main structural types based on the functions they are designed to achieve. Of these four types, three are ionic surfactants that transform into electrolytic dissociation ions (atoms or groups of atoms bearing an electrical charge) when dissolved in water, and the remaining type is nonionic surfactants, which do not form ions. The three ionic surfactants are further subdivided based on the type of ion they form in water: anionic (or negative ion) surfactants, cationic (or positive ion) surfactants and amphoteric (containing both positive and negative ions) surfactants.

Types of surfactants	Characteristics	Main applications	
	Superb emulsifying and dispersing properties	Laundry detergent	Shampoo
Anionic surfactants	Good teaming Not susceptible to temperature	Shower gel	
	Absorbed by textiles, etc.	Hair conditioner	Fabric softener
Cationic surfactants	Antistatic effect Sterilizing effect	Disinfectant	
Amphoteric surfactants	Non-irritative to the skin	Shower gel	Dishwashing liquid
	 Superb solubility in water Synergetic effects with other surfactants 	Shampoo	
	Balance of hydrophilic and hydrophobic properties easily adjustable		
Nonionic surfactants	 Superb emulsifying and solubilizing properties 	Laundry detergent	Emulsifier/solubilizer
	Low foaming	Dispersant	Metal processing oil
	 Susceptible to temperature 		

Main Actions and Applications

Function	Actions and effects	Applications
Emulsifying, dispersing Mixes incompatible substances	Mixes water and oil and makes an emulsion. Makes a uniform dispersion with fine particles floating on the water surface.	Ice cream, margarine, paints, inks
Moistening, permeating Makes wetting and permeation easier	Spreads agrochemicals thin and uniform on the leaf surfaces. Evenly disperses dyestuff and finishing agents on textiles and leathers.	Pesticide spraying, permeation of dyestuff and finishing agents on textiles
Making or removing foam Makes and/or removes foam	Takes in air bubbles in water and stabilizes. Prevents foaming.	Foam concrete, light gypsum boards
Cleaning Removes dirt	Removes dirt by moistening the surface of textiles and dirt, taking the dirt off the textiles by penetrating in between them, and emulsifying/dispersing the dirt.	Household detergents, bath soaps, machinery and metal cleaning agents
Softening, smoothing Softens and smooths	Improves the smoothness of yarns in the spinning and/or knitting process and makes soft and smooth-textured textiles.	Textile finishing agents, metal processing oils
Antistatic Prevents static electricity	Prevents static electricity generation by making the surfaces smooth. Makes static electricity easier to escape by forming a water-absorptive coating on the surface.	Antistatic and dustproofing treatment for synthetic fibers and plastic products
Rustproofing Prevents rust	Adheres to the metal surface and forms a coat to prevent oxygen (air) and water from contacting the metal and causing rust.	Metal surface treatment
Leveling, fixing Prevents uneven dying, enhances dye fastness	Makes the dyestuff gradually be absorbed by the textiles and brings about uniform dyeing.	Textile processing
Sterilizing Removes bacteria	A positively charged surfactant is absorbed to negatively charged bacteria, destroys the cells and sterilizes.	Hand sanitizer

Main Actions and Applications

Domestic wastewater contains surfactants. Most such wastewater is collected and treated at public sewage treatment plants and released to the environment although some could be released directly to rivers/oceans or land. Because surfactants are biodegradable, even if released into the environment they eventually degrade to carbon dioxide and water by bacteria. To preserve the natural environment, products with high biodegradability are being developed and proactively used in Japan.

Proprietary Technologies of DKS

Technical Road Map: Proprietary Technologies



Basic Technologies

Interface/surface control technology

A variety of applications can be achieved with surfactants, for example, emulsification, dispersion, solubilization, wetting/penetration, surface/interface tension control, foaming/defoaming and surface modification. The primary applications of surfactants are emulsification and dispersion for mixing together substances that normally are not mixed together. For example, although water and oils will separate after being mixed, adding a surfactant as an intermediate between water and oils enables the creation of stable emulsion. When washing dishes to which oil residue has adhered, the surfactant is first absorbed into the oil residue, where it reduces the interface tension between the oil and dishwashing liquid. Next, the liquid enters between the oil residue and dishware via wetting/ penetration. Finally, oil residue is separated from the dishware through physical force such as washing by hand. The residue is adsorbed into the micelles formed by the surfactant and then dispersed throughout the liquid, which prevents re-adherence of the residue. In this way, the surfactant's surface tension reduction function, wetting/penetration effect and other effects such as emulsification, solubilization and dispersion are major factors in the washing effect. Moreover, improving the wettability of paint and adding various functionality (e.g., leveling¹, water/oil repellent, antifouling, lubricity) can be included as types of technology for surface modification and interface control. These surfactants exhibit superior solubility in solvents and a high surface tension reduction with a small amount of use. For example, fluoropolymers are widely used in water- and oil-repellent agents for textile. Our Company is working to develop PFOA (perfluorocatanoic acid)-free fluoropolymers through surfactants.

≫ See P. 48

1. To smooth the surface

Alkylene oxide addition technology

This technology adds ethylene oxide (EO) and propylene oxide (PO) to raw materials of higher alcohols derived from natural sources such as coconut oil or palm oil, as well as phenols and amines.

Alkylene oxide functional design technology

Through the addition of alkylene oxide (AO), in addition to EO and PO sequencing such as random polymerization and block polymerization, this technology enables desired control for the number of added moles. This makes it possible to freely design a surfactant composition, which satisfies the required performance.

Urethanization technology

This technology synthesizes a urethane resin that is a polymer compound possessing urethane bonds in the main framework of the molecular structure. Through diverse combinations of the raw materials polyisocyanate and polyol, it is possible to change the type and length of the structural chain and to change the structure of both ends, thus creating a variety of physical properties. This makes it possible to create substances such as elastic urethane rubber and urethane elastomer, as well as soft/hard urethane foam in conjunction with foaming reaction. By utilizing these properties, these substances can be used in products such as cushioning, thermal insulation, molding and coating materials. In addition, water-based urethane resin can be obtained by emulsifying urethane resin is a produced by using a blocking agent to protect the terminal isocyanate groups generated by the reaction between polyisocyanate and polyol and emulsification. Reactive water-based urethane resin is composed of the two basic structures of a soft segment and a hard segment, and it undergoes quasi-crystallization during the resin molding process. Consequently, it combines flexibility, toughness and textile.

Cellulose modification technology

This technology synthesizes anionic water-soluble polymers with cellulose as the main raw material. The CMC (sodium carboxymethyl cellulose) synthesized via this technology can be used in various applications by changing the length of the molecular chain and the addition quantities of the carboxymethyl group. <u>CMC is known as a food additive</u>, is easily dissolved in either cold or hot water and becomes a viscous liquid that is colorless and transparent. It has an extensive record of use as a thickening stabilizer. Uses include as a thickening agent for food seasonings and a binding agent for fish feed and pesticides. CMC is known for functionality, for example, a dispersion stabilizer of lactoprotein in lactic acid bacteria beverages, an anti-redeposition agent in detergents and a dispersion/thickening stabilizer for toothpaste.

Sucrose esterification technology

This technology is used to obtain sucrose fatty acid esters (SEs), a non-ionic surfactant where natural sucrose is part of the hydrophilic group and higher fatty acids such as stearic acid and oleic acid are part of the lipophilic group. The high safety of SEs is recognized by international organizations (Joint FAO/WHO Expert Committee on Food Additives), and <u>SEs are approved as a food additive</u> in Japan since 1959. In addition to food products, SEs are used in a wide range of products such as pharmaceuticals and personal care products. Examples include emulsifiers, viscosity modifiers, anti-aging agents for starches and texture modifiers. Synthesis methods of SEs can be broadly divided into an esterification reaction method that uses fatty acid chlorides and fatty acid anhydrides, a transesterification method with lower alcohol esters of fatty acids and an enzyme method using enzymes such as lipase as the catalyst.

Cellulose nanofiberization technology

This technology is used to create the new material cellulose nanofibers (CNFs) by chemically or physically treating the naturally derived cellulose fibers to reduce the fiber width to a nano meter size. Our Company's CNFs are exceptional for their extremely fine fiber width on the single nano level. This fineness is achieved via chemical modification processing. Furthermore, by utilizing its exceptional characteristics such as viscosity behavior, emulsification and dispersion stability effect, our CNFs can be used in products such as cosmetics and general industrial products.

Emulsion polymerization technology

This technology conducts polymerization² by using surfactants to emulsify in water the monomers that do not dissolve in water. This enables synthesis of high molecular weight polymers that cannot be obtained via bulk polymerization or solution polymerization. Furthermore, because the polymer system is surrounded by water, it is easy to remove polymerization heat and perform stable temperature management. A polymerizable surfactant is a type of surfactant that possesses a radical polymerizable group³. It is used as an emulsifier for emulsion polymerization. Through copolymerization with monomers during the process of the emulsion polymerization, it improves the mechanical stability, chemical stability, freezing/thawing stability and foaming property of polymer dispersion, and improves the water resistance of the polymer film.

2. A reaction in which two or more molecular compounds having a simple structure are combined to form another compound having a large molecular weight. A molecular compound before polymerization is called a monomer. 3. The production of vinyl polymer is an important reaction, and refers to addition polymerization in which the growth chain is a radical (free group).

Application Technologies

Nano-dispersion technology

This technology stably mixes immiscible substances to bring out the diverse power inherent in materials. This technology is expected to support dispersants that enable dispersion in the nano range, various dispersion methods, and applicability to a wide range of materials such as inorganic powder, organic powder and oil. Nano materials can be broadly divided into carbon materials (e.g., fullerene⁴, nano tubes, nano fibers, graphene⁶), metals (e.g., gold, silver, copper) and metal oxides (e.g., silica, titania, zirconia), all of which possess diverse characteristics. This technology disperses these nano materials into mediums such as water, organic solvents and resins. However, as the particle size of substances is reduced to nano size, the impact of the Van der Waals force⁶ becomes stronger, resulting in problems such as particles being prone to agglomeration and a decrease in transparency. Interface control is required to prevent agglomeration.

Function/usage: Electronic and electric equipment (touch panels for smartphones and tablet PCs), cosmetics (sunscreen), eyeglass frames, etc.

4. Carbon atom cluster

Hexagonal lattice carbon allotropes
 Attractive and repulsive forces acting between molecules

or a reading and repulsive forece dealing between molece

Radiation curing technology

This technology instantly dries and cures coatings and paints of radiation-curable resin compounds by irradiating them with ultraviolet (UV) rays or electron beams (EBs). The technology is also called radcure (UV/EB curing). Radcure technology is used in a wide range of diverse fields due to its ability to conserve resources and energy and reduce environmental load. Its uses include clear coatings for construction materials and furnishings; anti-rust coatings for metal; resistance materials such as semiconductors, dry film and LCD displays; coatings for items such as mobile phones, optical fibers, plastics and paper; printing ink; plate-making materials; and adhesives. Our Company's monomers are made from the raw material alcohol using EO precision-addition technology. We offer a full lineup of products with added functionality (e.g., high hardness, low viscosity, low curling).

Function/usage: Adhesives, paints/coatings, printing/marking

Flame retardation technology

This technology adds/disperses compounds containing flame-retardant elements such as bromine, phosphorus, nitrogen, boron, silicon and/or antimony to/in polymer materials to make them flameretardant by a chemical reaction and bonding resulting from it. Recently, out of consideration for the environment, attention is being placed on the use of inorganic compounds such as hydrated metal compounds (Mg hydroxide, Al hydroxide) and nano-composites⁷ (MMT⁸, CNT⁹). Flame retardants are broadly divided into halogenated and halogen-free products that are based on phosphorus or inorganic substances. Halogenated flame retardants have superior flame-retarding efficiency and therefore are most widely used as flame retardants for plastics. Our Company's products are brominated flame retardants that give sufficient flame retardancy with a small amount of use. Moreover, the products interfere little with the superior properties of plastic, namely, heat resistance, heat stability, UV stability, workability, mechanical strength and electrical properties. The products are capable of satisfying requirements for the flame retarding of plastics, which are increasingly diverse and have increasingly advanced functions.

Function/usage: Electronic and electric equipment, OA equipment, construction products, automotive products, railway cars, textile, paper, aircraft, marine vessels, etc.

A general term for composite materials in which one material is atomized to a size of 1–100 nm and then kneaded into another material and diffused.
 Montmorillonite

Garbon nanotubes

Ionic liquid

Generally, ionic liquid is an ion pair compound that remains in a liquid state at/below 100°C. It has no vapor pressure and is nonflammable. Because ionic liquid has high safety and ion conductivity, it is used in electrolyte applications such as lithium-ion batteries and capacitors¹⁰. Ionic liquid also is attracting attention as a next-generation material in the energy device field and as a green solvent that reduces environmental impact. Ionic liquid is a salt composed only of ions (anions, cations). It dissolves a variety of organic and inorganic compounds and can conduct ions.

Function/usage: Reactive solvents, extraction solvents; as electrolytes, dye-sensitized solar batteries, lithium-ion batteries, electric bilayer capacitors and actuators; lubricants, dispersants and antistatic agents, etc.

10. An electronic component that stores and emits electricity (electric charge), also called a condenser. In addition, there are some electric double layer capacitors that have an order of magnitude larger capacitance than conventional capacitors.

Special Technology

Glycidylation technology

This technology belongs to Yokkaichi Chemical. Via synthesis technology using glycidyl ether, which is a bifunctional aliphatic epoxy compound possessing a flexible framework in the center of the molecule, the technology generates compounds with improved flexibility, toughness and water resistance of cured materials.

Function/usage: Electronic material

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Consolidated Financial Statements

Consolidated Balance Sheets

Assets	FY2018	FY2019
Current assets		
Cash and deposits	7,485	10,336
Notes and accounts receivable-trade	17,872	17,422
Merchandise and finished goods	9,456	9,357
Work in process	29	22
Raw materials and supplies	2,451	3,053
Prepaid expenses	276	275
Other current assets	1,803	2,139
Allowance for doubtful accounts	(15)	(12)
Total current assets	39,361	42,595
Non-current assets		
Tangible fixed assets		
Buildings and structures	25,407	28,127
Accumulated depreciation	(14,451)	(15,094)
Buildings and structures, net	10,955	13,032
Machinery, equipment and vehicles	34,107	35,537
Accumulated depreciation	(28,754)	(29,533)
Machinery, equipment and vehicles, net	5,353	6,003
Tools, furniture and fixtures	3,795	3,938
Accumulated depreciation	(3,235)	(3,295)
Tools, furniture and fixtures, net	559	642
Land	9,182	9,227
Leased assets	1,470	1,717
Accumulated depreciation	(902)	(1,046)
Leased assets, net	568	670
Construction in progress	3,104	3,697
Total tangible fixed assets	29,724	33,274
Intangible fixed assets		
Goodwill	871	675
Others	477	455
Total intangible fixed assets	1,348	1,130
Investments and other assets		
Investment securities	4,037	3,465
Long-term loans receivable	268	19
Long-term prepaid expenses	232	257
Deferred tax assets	91	122
Net defined benefit assets	569	608
Other assets	277	269
Allowance for doubtful accounts	(6)	(6)
Total investments and other assets	5,472	4,737
Total non-current assets	36,545	39,141
Total assets	75,906	81,736

		(Millions of yen)
Liabilities	FY2018	FY2019
Current liabilities		
Notes and accounts payable-trade	12,926	11,386
Short-term loans payable	6,604	7,273
Lease obligations	227	236
Accrued expenses	251	310
Income taxes payable	704	702
Accrued business office taxes	37	38
Provision for bonuses	678	746
Other current liabilities	2,790	2,948
Total current liabilities	24,220	23,644
Non-current liabilities		
Corporate bonds	_	6,000
Long-term loans payable	16,862	16,672
Lease obligations	497	529
Deferred tax liabilities	298	193
Net defined benefit liability	98	111
Asset retirement obligations	73	73
Other non-current liabilities	264	246
Total non-current liabilities	18,095	23,826
Total liabilities	42,315	47,470

Net assets	FY2018	FY2019
Shareholders' equity		
Capital stock	8,895	8,895
Capital surplus	7,237	7,250
Retained earnings	15,934	16,882
Treasury shares	(1,068)	(1,051)
Total shareholders' equity	30,998	31,977
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	28	(537)
Foreign currency translation adjustment	26	11
Remeasurements of defined benefit plans	271	225
Total accumulated other comprehensive income	325	(299)
Non-controlling interests	2,266	2,587
Total net assets	33,591	34,265
Total liabilities and net assets	75,906	81,736

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Data Section

(Millions of yen)

Consolidated Statements of Income

	FY2018	FY2019
Net sales	59,574	61,456
Cost of sales	44,130	45,991
Gross profit	15,444	15,465
Selling, general and administrative expenses		
Selling expenses	4,577	4,679
General and administrative expenses	6,525	6,631
Total selling, general and administrative expenses	11,103	11,310
Operating income	4,341	4,154
Non-operating income		
Interest income	6	6
Dividend income	64	75
Share of profit of entities accounted for using equity method	63	62
Insurance income	35	24
Rent income	34	35
Other non-operating income	47	54
Total non-operating income	251	258
Non-operating expenses		
Interest expenses	196	200
Corporate bond interest	_	3
Corporate bond issuance costs	_	138
Bad debt loss	_	400
Other non-operating expenses	220	146
Total non-operating expenses	417	888
Ordinary income	4,175	3,524
Extraordinary income		
Gain on sales of shares of subsidiaries and associates	141	_
Total extraordinary income	141	-
Extraordinary losses		
Loss on disposal of non-current assets	96	160
Impairment loss	240	-
Total extraordinary losses	337	160
Profit before income taxes	3,979	3,364
Income taxes—current	1,110	1,102
Income taxes-deferred	57	(88)
Total income taxes	1,168	1,013
Profit	2,810	2,350
Profit attributable to non-controlling interests	229	335
Profit attributable to owners of parent	2,581	2,014

Consolidated Statements of Comprehensive Income

	FY2018	FY2019
Profit	2,810	2,350
Other comprehensive income		
Valuation difference on available-for-sale securities	(503)	(565)
Foreign currency translation adjustment	(326)	24
Remeasurements of defined benefit plans	(8)	(47)
Share of other comprehensive income of entities accounted for using equity method	(26)	(9)
Total other comprehensive income	(864)	(597)
Comprehensive income	1,945	1,752
Comprehensive income attributable to owners of parent	1,824	1,389
Comprehensive income attributable to non-controlling interests	121	363

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(Millions of yen)

Consolidated Financial Statements

Consolidated Statements of Cash Flows

Consolidated Statements of Cash Flows		(Millions of yen)
	FY2018	FY2019
Cash flows from operating activities		
Profit before income taxes	3,979	3,364
Depreciation	2,555	2,724
Amortization of goodwill	110	196
Bad debt loss	_	400
Increase (decrease) in allowance for doubtful accounts	0	(2)
Interest and dividend income	(70)	(81)
Interest expenses	196	200
Corporate bond interest	_	3
Corporate bond issuance costs	_	138
Share of loss (profit) of entities accounted for using equity method	(63)	(62)
Loss (gain) on disposal of tangible fixed assets	96	160
Impairment loss	240	_
Loss (gain) on sales of shares of subsidiaries and associates	(141)	_
Decrease (increase) in notes and accounts receivable-trade	(1,277)	462
Decrease (increase) in inventories	(1.894)	(467)
Increase (decrease) in notes and accounts pavable-trade	688	(1.546)
Increase (decrease) in net defined benefit liability	(185)	(66)
	(103)	(00)
Other cash flows from operating activities	197	(554)
	4,432	4,866
Interest and dividend income received	155	95
Interest expenses paid	(195)	(200)
	(1,155)	(994)
Net cash provided by (used in) operating activities	3,236	3,766
Cash flows from investing activities	(10)	
Payments into time deposits	(43)	(210)
Proceeds from withdrawal of time deposits	49	204
Purchase of tangible fixed assets	(3,707)	(5,538)
Purchase of investment securities	(970)	(32)
Purchase of shares of subsidiaries resulting in change in scope of consolidation	(780)	_
Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation	130	-
Payments for loans receivable	(250)	(153)
Collection of loans receivable	1	1
Proceeds from subsidy income	80	70
Other cash flows from investing activities	(205)	(183)
Net cash provided by (used in) investing activities	(5,694)	(5,842)
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	(685)	(245)
Proceeds from long-term loans payable	5,918	6,000
Repayments of long-term loans payable	(6,005)	(5,289)
Income from issuance of corporate bonds	_	5,861
Redemption of bonds	(50)	-
Revenue from sale and leaseback	_	32
Repayments of lease obligations	(321)	(303)
Purchase of treasury shares	(0)	(0)
Cash dividends paid	(709)	(1,067)
Dividends paid to non-controlling interests	(41)	(42)
Proceeds from share issuance to non-controlling shareholders	385	_
Net cash provided by (used in) financing activities	(1,510)	4,946
Effect of exchange rate change on cash and cash equivalents	(155)	(21)
Net increase (decrease) in cash and cash equivalents	(4,123)	2,847
Cash and cash equivalents at beginning of period	11,402	7,278
Cash and cash equivalents at end of period	7,278	10,126



Dialogue with Shareholders and Investors

Disclosing the necessary corporate information in a timely and appropriate manner, the Company attaches importance to the occasions for communicating with the wide range of people concerned.

While actively conducting dialogues with its many investors, the Company has been able to seize opportunities for dialogue involving stories about its creation of value.

Through the words of the Chairman himself, the Company arranges regular large and small meetings with investors. In addition, with regard to explaining financial performance and business scope, the personnel in charge conduct interviews and offer direct explanations as part of their everyday tasks. As this Report serves as a tool for sustainable and constructive dialogue, we are working to improve corporate value, including mutual understanding through active communication.

Ordinary General Meeting of Shareholders

The 156th Ordinary General Meeting of Shareholders was held at the Rihga Royal Hotel Kyoto on Wednesday, June 24, 2020. This year, we recommended that voting rights be exercised by writing in advance or via the Internet to prevent the spread of COVID-19. The venue was able to ensure sufficient social distance, and the proceedings were conducted with measures taken to prevent infections in consideration of hygiene and health. The meeting, which prioritized the safety of shareholders, officers and employees, lasted 21 minutes and was attended by 22 people. The Ordinary General Meeting of Shareholders held on June 24, 2020



Dialogue with Shareholders and Investors

Dialogue with Institutional Investors and Analysts

We hold briefing sessions for investors covering the first-half and full-year periods.

In the fiscal year ended March 31, 2020, large meetings were held at the Securities Analysts Association of Japan and

smaller meetings were at the Company's Tokyo Headquarters. There was a total of 110 attendees for the first-half and full year, and the Company hosted a relaxed dialogue via a Q&A format.



Number of dialogues in the fiscal year ended March 31, 2020



Dialogue-Based Activities in the Fiscal Year ended March 31, 2020

Results briefing	2
Small meetings for institutional investors and analysts	106
(Of which, meetings with overseas investors)	(6)

Dialogue with Individual Investors

In consideration of various circumstances including the impact of COVID-19, the management briefing (Kyoto venue) and round-table conference after the general meeting of shareholders, as well as the management briefing (Tokyo venue) scheduled on a different day, were all cancelled. This fiscal year, we will disclose the results of a postcard questionnaire sent to shareholders. When asking about newly established IR activities, we received more interest in the integrated report than anticipated. Thus, we will continue to create and enhance report content so that readers can easily understand our management policy and direction.

Expectation for expanded integrated report content



Question: What are your expectations for DKS IR activities?



DKS REPORT 2020

Domestic/Overseas Network

Domestic Network



Subsidiary and Annated Companies (Japan)

Company name	Location	Business activities
Yokkaichi Chemical Co., Ltd.	2-1 Miyahigashi-cho, Yokkaichi, Mie 510-0843, Japan Phone +81-59-345-1161 Fax +81-59-345-1159	Production and sales of surfactants
Gembu Co., Ltd.	2nd Floor, Osaka Asahi Seimei Kan, 4-2-16 Koraibashi, Chuo-ku, Osaka 541- 0043, Japan Phone +81-6-6229-1840 Fax +81-6-6229-1845	Sales of detergents, finishing agents and equipment for professional laundry, sales of industrial/professional-use deodorants
Dai-ichi Kenkou Co., Ltd.	8th Floor, Yaesuguchi Daiei Building, 1-3-1 Kyobashi, Chuo-ku, Tokyo 104- 0031, Japan Phone +81-3-3275-0583 Fax +81-3-3275-0604	Production and sales of agents for civil engineering and construction
Dai-ichi Ceramo Co., Ltd.	432 Gokasho Hiyoshi-cho, Higashiomi, Shiga 529-1403, Japan Phone +81-748-48-5377 Fax +81-748-48-5322	Production and sales of materials for ceramics and injection molding
Kyoto Elex Co., Ltd.	1 Ogawara-cho, Kisshoin, Minami-ku, Kyoto 601-8391, Japan Phone +81-75-326-2883 Fax +81-75-326-2884	Production and sales of electronic materials
K&D Fine Chemical Corporation	1 Niihamacho, Chuo-ku, Chiba, Chiba 260-0826, Japan Phone +81-43-262-2039 Fax +81-43-262-4396	Production and sales of surfactants
Biococoon Laboratories, Inc.	4-3-5 Ueda, Morioka, Iwate 020-8551, Japan Phone +81-19-613-5564 Fax +81-19-613-5570	Wide-ranging research and development from pharmaceuticals to health care ingredients Production and sales of foods as well as health care products
Ikeda Yakusou Co., Ltd.	1808-1 Nakazu, Shuzu, Ikeda-cho, Miyoshi, Tokushima 778-0020, Japan Phone +81-883-72-5320 Fax +81-883-72-5005	Production of drug substances and various ingredients used in health foods Production and sales of life sciences products including pharmaceuticals and quest-pharmaceutical products

Where Have We Come From, Where Are We Going?

Overseas Network





(Wuxi) Co., Ltd.

Operation Bases (World)			
Company name	Location	Business activities	
P.T. Dai-ichi Kimia Raya	JI. Maligi II Lot G-2 Kawasan Industri KIIC, Karawang Barat, Jawa Barat, Indonesia Phone +62-21-8904574 Fax +62-21-8904576	Production and sales of textile agents, paper processing agents, flame retardant for plastics and food additives	
Chin Yee Chemical Industries Co., Ltd.	11F, Lidye Commercial Building, 22 Nanking West Road, Taipei, Taiwan Phone +886-2-2556-9353 Fax +886-2-2558-6833	Production and sales of surfactants and plastic materials	
DKS (Shanghai) International Trading Co., Ltd.	Room #1104, New Town Center Building, 83 Loushanguan Road., Shanghai, P.R. China Phone +86-21-6236-8080 Fax +86-21-6236-8700	Trading	
Sisterna B.V.	Belder 30A 4704 RK Roosendaal, The Netherlands Phone +31-165-524730	Application development and sales of sucrose esters	
Chin Yee Chemical Technologies (Wuxi) Co., Ltd.	Piot 88-C, Wuxi National High & New Tech Industrial Development Zone, 214028, Wuxi, Jiangsu, P.R. China Phone +86-510-8520-0156 Fax +86-510-8520-4878	Production and sales of plastic materials	
DDFR Corporation Ltd.	25th Floor, One Capital Place, 18 Luard Road, Wanchai, Hong Kong Phone +852-2827-7761 Fax +852-2824-1502	Sales of plastic additives, e.g., flame retardants	

Corporate Data (As of March 31, 2020)

Corporate Name	DKS Co. Ltd.
Foundation	April 1909
Incorporation	August 1918
Paid-in Capital	8,895 million yen
Number of Employees	531 (consolidated: 1,032)
Total Number of Shares Outstanding	10,684,321 shares
Share Unit Number	100 shares
Number of Shareholders	3,624
Stock Listing	Tokyo Stock Exchange
Securities Code	4461
Date of Record	Every year on March 31, and other dates as necessary and publicly announced in advance
Annual Meeting of Shareholders	Every year in late June
Shareholder Registry Administrator	Mizuho Trust & Banking Co., Ltd. 1-2, Yaesu 1-chome, Chuo-ku, Tokyo

Headquarters / Laboratory

5 Ogawara-cho, Kisshoin, Minami-ku, Kyoto 601-8391, Japan Phone: +81-75-323-5911 Fax: +81-75-326-7356

Main Branch

55 Nishishichijo Higashikubo-cho, Shimogyo-ku, Kyoto 600-8873, Japan

Tokyo Headquarters

8th Floor, Yaesuguchi Daiei Building, 1-3-1 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan Phone: +81-3-3275-0561 Fax: +81-3-3275-0599

Osaka Branch

2nd Floor, Osaka Asahi Seimei Building, 4-2-16 Koraibashi, Chuo-ku, Osaka 541-0043, Japan Phone: +81-6-6229-1717 Fax: +81-6-6229-1793

Nagoya Office

7th Floor, Nagoya International Center Building, 1-47-1 Nagono, Nakamura-ku, Nagoya 450-0001, Japan Phone: +81-52-571-6331 Fax: +81-52-586-4539

Kyushu Office

4th Floor, Hakata Ekimae Daiichi Building, 1-2-3 Hakata-eki Minami, Hakata-ku, Fukuoka 812-0016, Japan Phone: +81-92-472-6353 Fax: +81-92-472-4989

List of Major Shareholders (Top 10)

Shareholder name	Number of shares	Ratio of shareholding (%)	
Japan Trustee Services Bank, Ltd. (Trust account)	1,914,700	18.83	
The Master Trust Bank of Japan, Ltd. (Trust account)	893,200	8.78	
The Dai-ichi Life Insurance Company, Limited	613,400	6.03	
Mizuho Bank, Ltd.	427,000	4.20	
The Bank of Kyoto, Ltd.	417,000	4.10	
BNP PARIBAS SECURITIES SERVICES LUXEMBOURG/JASDEC/ FIM/LUXEMBOURG FUNDS/UCITS ASSETS	380,000	3.74	
Asahi Mutual Life Insurance Company	339,400	3.34	
Shareholding Association of DKS's Business Partners	297,400	2.92	
DKS Employee Shareholding Association	260,884	2.57	
Trust & Custody Services Bank, Ltd. (Securities Investment Trust Unit)	157,200	1.55	
Notes: 1. The Company has 514,826 treasury shares that are excluded from the major shareholders above.			

otes: 1. The Company has 514,826 treasury shares that are excluded from the major shareh 2. The ratio of shareholding is calculated after subtracting treasury shares.

Shareholder Distribution



(DKS REPORT 2020)

How Can We Be Sustainable?

On Publishing the DKS Report 2020

This issue marks the fifth time the DKS Group has published its integrated report since the initial report in the fiscal year 2016. In April, we started our new five-year plan "FELIZ 115." This is an important report that explains DKS value creation to all stakeholders.

With the arrival of COVID-19, which has spread since the beginning of the year and shows no signs of abatement, the source of corporate value is being questioned. We look at the current state of the Company and explain the path of future growth in an easily understandable manner.

COVID-19 provides us with an opportunity to reconfirm the validity of the "FELIZ 115" management plan (April 2020–March 2025) announced in January. This plan, which we began formulating last fall, is based on our aims for the year 2030. We revised our 12-yearold business headquarters system and reorganized it into a four headquarters system. The purpose is to separate management and execution and improve quick decision-making and management efficiency. The ratio of outside directors has been increased to onethird, and the function of the Board of Directors is enhanced so that management recommendations can be expected from external viewpoints.

The Octopus model is an integrated concept that primarily considers value creation from six types of capital with nonfinancial explanations. Through the computer invented in the 20th century, the concept of value changed drastically in the 21st century. The virtual or digital age is here. However, COVID-19 has brought a halt to human activity, which is the starting point of the economy. We take this as a wake-up call in determining whether the source of value is real or analog. We must create corporate value and new business models supported by integrated thinking. As a chemical intermediary materials manufacturer, I believe that the source of value is cost. We will contribute to society by embodying the intangible, meaning intangible assets that create value over the long term. The value created by our business model is linked to SDGs and ESG initiatives. Our Company Credo is "contributing to the nation and society through industry," and we will focus on putting this into practice. In March of this year, DKS was selected as a Health and Productivity Management Brand 2020, a symbol of happiness. FELIZ means happy, and DKS shares happiness with all our stakeholders through happiness-driven management. As the CEO responsible for the production of this report, I can attest to the legitimacy of the publication process and the accuracy of the content herein.

We continue to look forward to feedback from our stakeholders that will allow us to produce even more substantial and meaningful reports in the years ahead.



September 2020 Chairman CEO SAKAMOTO Takashi

Editor's Note

Launched at the same time as our new five-year management plan "FELIZ 115," the Company's integrated report is now in its fifth issue.

Amid the increasing future uncertainty and lack of transparency brought about by the spread of COVID-19, we have tried in various ways to explain the DKS value creation story based on the Uni-Top strategy to our stakeholders.

In reviewing the value creation process, we attempted to clarify how value is created by enhancing our business model using the main management resources at the core of our organization. We are also rethinking the identification of important risks from the perspective of materiality.

For the first time, we have included an interview with an outside director to introduce our efforts to enhance the effectiveness of corporate governance. At the same time, new members were added to the production process to disseminate financial and nonfinancial information and strengthen report content with consideration for overseas investors.

We also sought to cooperate with the production company to improve the report from a visual perspective, making it easier to read.

We would like to take this opportunity to express our gratitude to all parties concerned for their cooperation in the editing of this report. We also welcome frank opinions from readers as we prepare for the next fiscal year's publication.



Public & Investor Relations Department



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