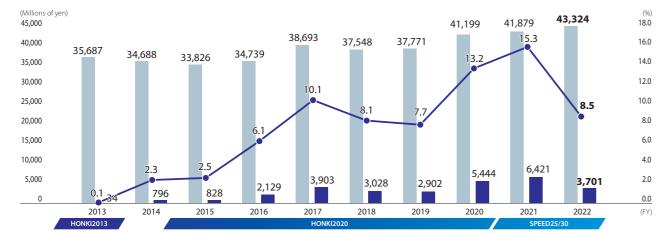
Looking Back at Mid-term Management Plans

	HONKI 2013 (FY2011 - FY2013) Year of Reconstruction (FY2014)	HONKI 2020 (FY2015 - FY2020)	
Vision and positioning	We aim to become a corporation that steadily supplies "Only One and Number One" materials in the global and niche markets in 2016 (Year of 100th anniversary) and to achieve this, we will prepare ourselves for future growth by FY2013. FY2013 targets: Consolidated net sales of 50 billion JPY; Consolidated operating profit of 5 billion JPY; Operating margin of 10.0%	We aim to become a corporation that steadily creates "Only One and Number One" specialty products in the global and niche markets in FY2020, and to achieve this, we will prepare ourselves for future growth.	
Project outline	Outline • Each business is classified into one of the four stages of growth, and we focus on strengthening core businesses while enhancing and cultivating the businesses of the future. Measures • Strengthening of core businesses that support the Company • Business expansion for future growth/promotion of new business creation • Further reinforcing the global operating system • Reinforcement of Corporate Social Responsibility (CSR) initiatives	Outline • Each business is classified into one of the four stages of growth, and we focus on strengthening core businesses while enhancing and cultivating the businesses of the future. Measures • Regaining competitiveness and securing a stable revenue base – core businesses • Establishing the Pillars of the Next Generation – growth businesses • Expanding business areas by creating new added value – cultivation businesses, creation of new products • Further reinforcing the global operating system and developing human resources • Strengthening CSR initiatives	
Looking back	Core businesses Nippon Peroxide Co., Ltd. merged with the Company to strengthen hydrogen peroxide and related products, and promoted cost reduction at the Koriyama Plant. Growth businesses We strengthened the production system of SFC CO., LTD. (Korea) to further develop the OLED material business. Cultivation businesses Developed CCA for color, toner peripheral materials, and new polyol through the project as a business development utilizing the knowledge gained from existing products. New product development Launched the New Product Exploration Project and while exchanging information with industry, government and academia, we worked on a variety of research themes based on the keywords: environment and energy. Major capital investment Made capital investment of approx. 10 billion JPY, mainly in the OLED field. Reinforcement of the global operating system In May 2012, the Group consolidated its head office functions to promote integrated Group operations. The Group has enhanced its sales capabilities through the establishment of local subsidiaries in Shanghai and Korea.	Core Businesses Progress was made in preparations for future expansion of aluminum coloring dyes and phosgene derivatives, including creating new facilities. Cultivation Businesses Cultivation for next-generation pillars continued, including dyes for color filters. Sales of peroxide agricultural materials grew due to extreme weather. Growth Businesses OLED materials grew into a top business as a result of higher sales and profit. New product development New products sales reached 3.4 billion JPY in FY2020, mainly in OLED materials and agroscience businesses (excluding those at SFC). Major capital investments Made Company-wide 10.1 billion JPY of capital investment Opened new aluminum coloring dye facilities Enhanced production and research facilities for OLEDs (at SFC), etc. Further reinforced the global operating system Newly established development bases and manufacturing bases in South Korea, a leading OLED market, advanced our globalization in terms of R&D and production Established a local subsidiary in Düsseldorf, Germany, to strengthen our sales activities in Europe Promoted the global procurement of raw materials; strengthened efforts to address such issues as China risk Reinforcement of CSR initiatives Committed to CSR by taking into account support for ESG management and contribution to achieving SDGs. External evaluation also improved	
Achieve- ments	 Expanded business for future growth and planted seeds for new product creation Changing business environment, a sharp rise in raw material and fuel costs, declining sales volume and unit prices, etc., caused severe problems for the Hodogaya Chemical Group's core businesses and its earnings base deteriorated significantly. In FY2012 and FY2013, in particular, the Company posted two consecutive fiscal years of consolidated net losses, and the situation became critical. FY2014 was positioned as a Year of Reconstruction, with the goal of achieving profitability in all profit categories, which was achieved as a result of the concerted efforts of all personnel. 	Consolidated net sales Although annual growth rate was 4% during the period due to expansion of OLED business and other factors, the target of 50 billion JPY was not achieved. Consolidated operating profit Profit increased due to special demand for materials for PCR diagnostic kits, and the target was achieved. Consolidated operating margin Target achieved with contributions from OLED business and materials for PCR diagnostic kits	
Issues	Expand sales, reduce costs, and launch products that meet customer needs to secure a stable revenue base Expand business and reap the benefits of new product creation Further utilization and expansion of overseas business bases	 Searching for and quickly cultivating new growth drivers following the OLED materials business Building a business portfolio that will be able to accommodate the changes that take place in a future environment Further strengthening the combined three functions of R&D, production, and sales 	

Performance trends

21



■ Net sales (left) ■ Operating profit (left) • Operating margin (right)

How We Create the Future

Mid-term Management Plan SPEED 25/30 (FY2021-FY2030)

VISION

A corporation that contributes to establishing a sustainable society by means of our original portfolio and environmentally friendly manufacturing, with a focus on specialty products

The Hodogaya Chemical Group will speedily transform itself to our "target figure" in FY2025 and to our "ideal figure" in FY2030, by means of:

Specialty products that construct a

Portfolio built up with great originality;

Engagement improvement that contributes to

ESG management promotion;

Digital transformation-led competitiveness enhancement

Reinforced business	Creating new products	Strengthening operations	Stronger man	agement founda
Business Strategy Roadmap			Greater organizational capabilitie Greater motivation to work	
Generating sustainable growth in both strategic businesses and core businesses Moving forward with concentration and creating new portfolio	Promoting technical innovation for strategic businesses and contributing to business expansion Quickly commercializing development themes Continually generating R&D topics in order to expand into new fields	Complete system to quickly launch new products Conducting secure, safe production of environmentally friendly products with extremely high productivity	Responding to valueEven stronger	advent of corpor
Undertake strategic inves		including business investments (M&A	, etc.), IT, and in	frastructure
Undertake strategic inves		inability and DX	, etc.), IT, and in	frastructure
Undertake strategic inves	Promote susta		, etc.), IT, and in	frastructure
Undertake strategic inves	Promote susta	inability and DX	, etc.), IT, and in	frastructure
	Promote susta Ideal figur A well-con	res in FY2030	, etc.), IT, and in	frastructure
Strengthening operations	Ideal figur A well-con Continuing to create	res in FY2030 structed business portfolio	, etc.), IT, and in	
Strengthening operations Expanding our sphere of activity	Promote sustand Ideal figure A well-continuing to create Achieve	res in FY2030 structed business portfolio e new products for the global market	, etc.), IT, and in	Promoting DX
Strengthening operations Expanding our sphere of activity Higher efficiency	Promote susta Ideal figure A well-con Continuing to create Achiev	res in FY2030 structed business portfolio e new products for the global market ing a high productivity		Promoting

Progress of the management targets

		1 12021 1630113	1 12022 1630113	r 12025 targets
퍍	Net sales	41.8 billion JPY	43.3 billion JPY	50 billion JPY
ancia	Operating profit	6.4 billion JPY	3.7 billion JPY	7.5 billion JPY
Financial targets	Operating margin	15.3%	8.5%	15%
gets	ROE	8.1%	5.3%	9%
Non-f	CO ₂ emissions (CO ₂ emission intensity)	49,247t-CO ₂ (1.1759t-CO ₂ /million JPY of net sales)	45,722t-CO ₂ (1.055t-CO ₂ /million JPY of net sales)	43,400t-CO ₂ (0.868t-CO ₂ /million JPY of net sales)
	Energy intensity (per million JPY of net sales)	0.698kl	0.636kl	0.606kl
Non-financial targets	Industrial waste volumes	2,746 t	3,477t	Same level or less than previous FY
tare	ESG evaluation score (FTSE Russell score)	2.7	3.0	3.7
gets	Engagement score	-	-	Gradually raise score
	Percentage of female managers	11%	11%	13%

FY2022 results

FY2021 results

Mid-term Management Plan SPEED 25/30 (FY2021-FY2030)

Progress of SPEED 25/30 in FY2022

Although some signs of a recovery in economic activity were seen due to the relaxation of the movement restrictions that had been caused by the COVID-19 pandemic, there were many causes for concern in FY2022, the second year of the Mid-term Management Plan SPEED 25/30. Those causes for concern included the protracted Russia-Ukraine conflict, soaring raw material and fuel prices, rising commodity prices, and a weak yen, all of which led to business activities being conducted in the face of an uncertain future. In contrast, the Company made significant progress in projects such as the joint development of a new agricultural material with ASAHI AGRIA CO., LTD. and the construction of a new biotechnology building (for advancing into the field of nucleic acid medicine) at SFC CO., LTD. in South Korea.

FY2022 Progress in Business Terms

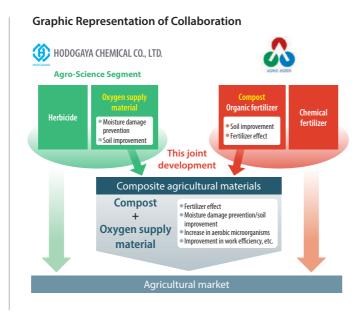
					Results	
Segment	Subsegment	Reinforced business	Creating new products	Strengthening operations	Sales by Segment	Operating Profit by Segment
Functional Colorants	OLED Materials Business	Consideration given to the establishment of technical service bases (Strengthening relationships with customers, introduction of technologies)	Promoting development of OLED Promoting research of new ideas: Organic cathode materials Organic solar cell materials Near-infrared absorption materials	Installation of special equipment for trial production which contributes to / new product development	OS+ 41.6% C (17.9 billion JPY)	70.3% (2.6 billion JPY)
	Colorants Materials Business	Launch of environmentally friendly aluminum coloring dyes into the market	Promoting development of environmentally friendly aluminum coloring dyes		itting to re	
Specialty Polymers	Functional Polymers & Specialty Chemicals Business	Market launch/sales expansion of new Bio-PTG into the market	Development of special products (PTG)		26.7%	5.7% 23.3% illion JPY) (0.86 billion JPY)
	Construction Materials Business	Sales expansion of next-generation waterproofing materials			intensity (11.5 billion JPY)	
Basic Chemicals	Peroxide Business	Expansion of uses of peracetic acid (food additive)		Reinforce production capabilities for agricultural material products	16.5% (7.1 billion JPY)	-15.5% (-0.57 billion JPY)
Agro-Science	Agrochemical Business	Expansion of the peroxide agricultural materials business			10.7% (4.6 billion JPY)	12.3% (0.45 billion JPY)
Logistics	Logistics Business				4.3% (1.8 billion JPY)	9.2% (0.34 billion JPY)

Progress of Major Measures in FY2022

Stronger management foundation		FY2022 results	FY2025 non-financial targets	
Strategic Investments	Construction of a new Construction of a new piotechnology building begins		—	
Improve Engagement			Gradually raise engagement score Percentage of female managers: 13%	
Promote sustainability	Reduce CO2 emissions Reduce energy intensity Reduce industrial waste volumes Reduce power consumption Promote ESG	Reduce CO ₂ emissions: 45,722t-CO ₂ (1.055t- CO ₂ /million JPY of net sales) Reduction of energy intensity: 0.636kl Reduction in industrial waste volumes: 3,477t CO ₂ -free power consumption (Yokohama Plant, Tsukuba Research Institute) Adoption of ICP (Koriyama Plant)	Reduce CO ₂ emissions: 43,400t-CO ₂ (0.868t-CO ₂ /million JPY of net sales) Reduction of energy intensity: 0.606kl Reduce industrial waste volumes: Less than the amount generated in the previous FY SG evaluation score (FTSE Russell score): 3.7	
Promotion of DX/Improved Operational Efficiency	Promoting business reforms and various considerations for renewal of core systems	RPA personnel development ERP system renewal plan formulation Promotion of paperless operations Building of remote work infrastructure facilities Streamlining of expense settlement tasks Streamlining of seal affixing operations	_	

Promotion of Jointly Developed New Composite Agricultural Materials

Hodogaya Chemical having signed a joint development agreement with ASAHI AGRIA CO., LTD. covering the R&D of new agricultural materials, the two companies decided to develop a new composite material—comprising an oxygen supply material and a compost, in which the focus is on commonality in areas such as soil preparation and soil improvement—and will work together toward its commercialization. A composite material that is expected to have the effect of a fertilizer in soil preparation and soil improvement, prevent moisture damage, increase aerobic microorganisms (biostimulant effect), and improve work efficiency, the two companies aim to make its use more widespread in the years to come. In the belief that this will contribute to the reduction of chemical pesticides and fertilizers under the Green Food System Strategy advocated by Japan's Ministry of Agriculture, Forestry and Fisheries, both companies will continue to work on developing materials that contribute to sustainable and environmentally friendly agricultural production and supplying them to the market.



SPEED 25/30 Initiatives from FY2023 Onward

Effective April 1, 2023, Hodogaya Chemical reorganized its OLED Materials Business Department and Color & Imaging Materials Department as the **Organic & Optical Device Materials Division** and **Coloring Materials Division**, respectively. Accelerating the building of our new business portfolio, we will respond promptly to customer requests on such matters as quality, supply, and sustainability with more advanced knowledge and detailed responses. To flexibly and efficiently execute business strategies for the further growth of our OLED-centered business in South Korea, we also newly established a **Korea Business Strategy Department** on July 1, 2023. We will further promote global collaboration through our three-pronged (R&D, production, and sales) system.

Continuing to steadily implement initiatives to reduce our environmental impact, such as reducing greenhouse gas (GHG) emissions and creating environmentally friendly products through technological innovation, we aim for sustainable growth with a product lineup that is full of originality and environmentally friendly manufacturing.

Business Initiatives

Segment	Subsegment	Reinforced business	Creating new products	Strengthening operations	
Functional Colorants		Optimization of global technical service bases (Introduction of technologies/strengthening of relationships with customers) Development and securing of personnel that will contribute to global business New developments in the bio business	Response to next-generation technologies Promoting development of OLED	Installation of special equipment (ensuring a stable production base)	
	OLED Advanced Materials Business	Strengthening of the global sales expansion of imaging materials		- Planned equipment renewal	
		- Expansion of color filter material sales	Promoting research of new ideas Lithium-ion battery materials (organic cathode materials) Near-infrared absorption materials Organic solar cell materials (perovskites)	Installation of special equipment for trial production which contributes to new product development	
	Coloring Material Business	Market launch/sales expansion of environmentally friendly aluminum coloring dyes	Promoting development of environmentally friendly aluminum coloring dyes	Establishing an increase in production of aluminum coloring dyes Establishment of a supply system for environmentally friendly aluminum coloring dyes	
		Developing uses (other than food) for natural dyes Expanding sales of halal products			
Specialty Polymers	Functional Polymers & Specialty Chemicals Business	Market launch/sales expansion of new Bio-PTG Strengthen global sales expansion of phosgene derivatives	Development of special products (PTG)	Installation of phosgene derivative trial production equipment Expansion of phosgene derivative production facilities	
	Construction Materials Business	Expanding sales of next-generation waterproofing materials			
Basic Chemicals	Peroxide Business	Expanding sales in the industrial chemicals field Expanding sales of peracetic acid (disinfectant, food additive)	Developing uses for agricultural and livestock materials	- Planned equipment renewal	
Agro-Science	Agrochemical & Agricultural Material Business	Business expansion through the introduction of new active ingredients Expanding the peroxide agricultural materials business Cultivate demand in new green space business Strengthening relationships with customers in development and sales	Development of the composite agricultural materials of compost and oxygen supply materials	- Increasing production capacity of oxygen supply materials	
Logistics	Logistics Business	Early expansion of the ISO tank container storage business		Consider automation and operational efficiency through IT utilization	

Major Measure Initiatives

Strengthen the Management Base	Content
Strategic investments	- Completion and operation of the new biotechnology building at SFC CO., LTD. in South Korea - Phosgene, agro-science (oxygen supply materials) production facility expansion
Increase engagement	 Implementation of various new measures, such as encouraging men to take childcare leave, office casual attire, Employee Stock Ownership Plan (J-ESOP), multi-assessment program, etc. Promote health and productivity management Utilization of diverse human resources Strengthening of human capital investment
Promote sustainability	• Reduce CO2 emissions • Reduce power consumption • Reduce industrial waste volumes • Promote ESG
Promotion of DX/Improvement of Operational Efficiency	Utilization of data accumulated by the Hodogaya Chemical Group Promotion of RPA, DX education, and leader development

Toward Achieving the Mid-term Management Plan SPEED 25/30

FY2023 being the halfway point of SPEED 25/30 Phase 1, this will be an important year for achieving the management target of FY2025 and realizing our target figure to be achieved by FY2025. In addition to steadily implementing the abovementioned important measures and investing in R&D, which we have been focusing on until now, we will appropriately invest in personnel (human capital) that will support the Hodogaya Chemical Group. Despite the rapid changes in the environment, we will once again return to the FY2030 ideal figure adopted for SPEED 25/30 and work together as a Group to implement the various measures.



Financial Strategy



We will practice value creation management with the goal of realizing highly efficient operations that can achieve a high ROE.

Kenji Tsujitsugu Director and Managing Executive Officer

Toward Greater Corporate Value –Initiatives to Improve PBR–

The Hodogaya Chemical Group aims to achieve a high ROE, a management target under the Group's Mid-term Management Plan SPEED 25/30, with an emphasis on growth investments, interest-bearing debt control, and shareholder returns. At the same time, we will practice value creation management in line with highly strategic balance sheet management.

Taking into consideration the Group's net interest-bearing debt, shareholders' equity, and shareholders' equity ratio in FY2022, Hodogaya Chemical's financial health and security currently stands at a high level. We will therefore pursue efforts to further bolster profitability, as well as those to enhance the ability to generate cash that coincides with greater profitability. We will create new value by selecting investment areas with our sights set on the coming future, engaging in the required degree of risk-taking, and executing appropriate resource allocations in a timely manner. Similarly, we aim to connect the outcomes of these efforts to greater corporate value in the future.

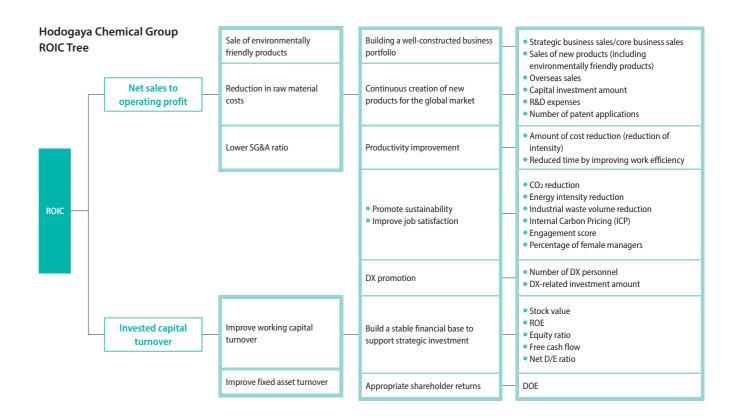
In addition, we remain conscious of our shareholders' equity as a risk buffer that allows us to invest in future growth while simultaneously promoting the policy of upgrading and expanding shareholder returns. As far as the return of profits to shareholders is concerned, we will work to provide shareholder returns in a stable, continuous manner, while reducing short-term performance volatility. Similarly, we will execute returns with an awareness of the Dividend on Equity Ratio (DOE). Our goal is to firmly maintain a balance between the three aspects of growth investments, interest-bearing debt control, and shareholder returns as part of our efforts to engage in highly efficient operations in a bid to realize a high ROE. In order to achieve this goal, we also recognize the importance of implementing financial and capital strategies in an ongoing manner that enable consistent growth in earnings per share (EPS).

Growth Investments and Financial Strategies under the Mid-term Management Plan

We will undertake the various types of investments outlined in our ideal figure for FY2030 as part of the Group's Mid-term Management Plan SPEED 25/30 in an appropriate manner. At the same time, we will grasp and manage the KGIs and KPIs set for these investments by the Company. In specific terms, we will invest in existing businesses to build a well-constructed business portfolio, intellectual property, including R&D to develop new products for the global market, other areas to improve efficiency in various ways to achieve high productivity, and human capital to enrich our personnel. Regarding funds necessary for investment, we ensure the liquidity of funds through cash flows from operating activities and financing through borrowing from financial institutions. In principle, consolidated subsidiaries do not procure funds from outside sources, and centralize funding within the parent company to

improve the efficiency of funding for the entire group.

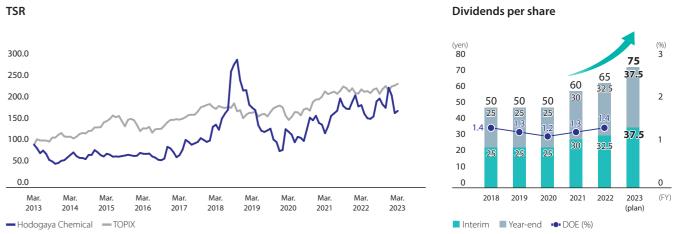
Moreover, Hodogaya Chemical Group's Mid-term Management Plan SPEED 25/30 includes even stronger finances in target figure through FY2025, we have also set targets for ROE, in addition to net sales, operating profit and operating margin. While aiming to improve sales and profits by promoting business strategies, we also aim to achieve our targets by promoting even stronger finances by improving capital efficiency and maintaining a sound financial position. Regarding the improvement of capital efficiency, we calculate the weighted average cost of capital (WACC). We have also set targets related to earnings plans and capital policies based on the interest-bearing debt costs and cost of capital (using the capital asset pricing model: CAPM), and we will steadily allocate management resources to achieve these targets.



Capital Policy and Shareholder Return Policy

The Hodogaya Chemical Group builds a sound and stable management foundation and continuously improves corporate value through appropriate cooperation with various stakeholders such as shareholders, investors, customers, business partners, local communities, society, and personnel. Regarding profits earned, we will strive to maintain an appropriate balance between, our basic policy, which is to use internal reserves for investment and other activities that will

lead to the growth of the Hodogaya Chemical Group, and returning profits to shareholders. Moreover, in our Mid-term Management Plan SPEED 25/30, we have set a goal of achieving stable dividends over the long term as part of our ideal figure in FY2030. Regarding shareholder returns, we will pay dividends to shareholders, while keeping DOE in mind and premised on improving profitability by promoting various measures set out in SPEED 25/30.



^{*}Total Shareholder Return (TSR): Total return on investment combining capital gains and dividends

^{*}TSR is calculated based on cumulative dividends and stock price fluctuations for Hodogaya Chemical, and TOPIX based on stock price index including dividends (prepared by Hodogaya Chemical based on Rhombers data etc.)

^{*}The graph value is the market price index by TSR with the closing price data as of the end of March 2013 as 100 (the holding period is until the end of March 2023)

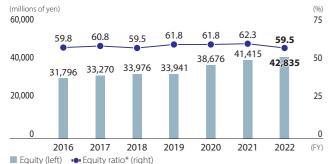
Financial and Non-Financial Highlights (Consolidated)

Net sales, Operating profit, Operating margin



Net sales totaled 43,324 million JPY, up 3.5% year on year. In contrast, operating profit was 3,701 million JPY, down 42.4% year on year on an operating margin of 8.5%. While demand for OLED materials increased in the Functional Colorants segment, demand for materials for PCR diagnostic kits declined substantially.

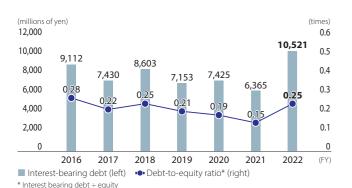
Equity, Equity ratio



* Equity ÷ total assets

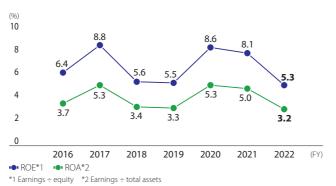
The equity ratio has remained stable at around 60% in recent years. We will continue to increase equity, mainly from profits generated from our businesses, and further stabilize the Group's management foundation

Interest-bearing Debt, Debt-to-equity ratio



The D/E ratio came in at 0.25 times owing to the increase in interest-bearing debt to support such activities as investments in strategic businesses in the Mid-term Management Plan.

ROE, ROA



In FY2022, ROE and ROA declined owing to the downturn in profit. Moving forward, we will endeavor to make more efficient use of our assets while continuing to increase profits.

Dividend per Share, DOE



* Total dividends ÷ shareholders' equity (consolidated)

We will consider earnings trends, future business expansion, unforeseen risks and other factors and pay a stable, sustainable and appropriate return to shareholders while being particularly aware of the Dividend on Equity Ratio (DOF)

*The Hodogava Chemical Group conducted a 10-1 reverse stock split of common shares effective

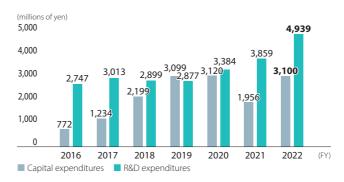
Free cash flow



* Cash flows from operating activities + cash flows from investing activities

In FY2022, free cash flow declined substantially owing to investments for future growth and increased inventories. Moving forward, we will continue to maintain sound balance between operating and investing activities to prepare for future growth.

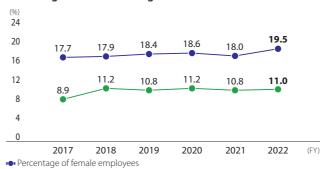
Capital expenditures, R&D expenditures



Our focus is primarily on capital expenditure and R&D in the Functional Colorants segment, which is the Hodogaya Chemical Group's growth driver. We will continue investments and undertake activities that contribute to

Percentage of female employees, Percentage of female managers

Percentage of female managers



The Hodogaya Chemical Group promotes the active participation of women as one of the Group's key measures. We have achieved the target of 10% or more for female managers since FY2018, and we aim to increase this to 13% or more by FY2025. We are implementing various measures to increase the percentage of female managers.

Percentage of personnel taking paid holidays, refreshment leave, and childcare leave



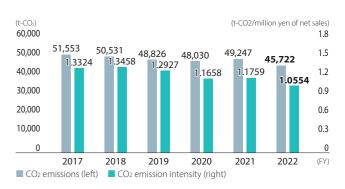
• Percentage of personnel taking refreshment leave (Hodogaya non-consolidated)

Percentage of male personnel taking childcare leave

Percentage of female personnel taking childcare leave

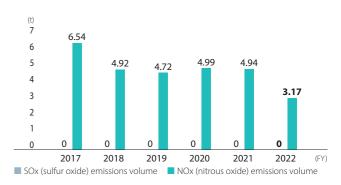
In addition to maintaining a percentage of personnel taking paid holidays in excess of 60% for the past six years, the Hodogaya Chemical Group has put in place a system of refreshment leave, which can be taken for five consecutive business days, since FY2018, so that personnel can physically and psychologically refresh themselves. Moreover, we have conducted internal awareness-raising activities to increase the percentage of male personnel taking childcare leave. The percentage of male personnel taking childcare leave was 83% in FY2022.

CO₂ emissions, CO₂ emission intensity (Japan)



Most of the greenhouse gases (GHG) emitted by Hodogaya Chemical are energy-derived CO₂. In FY2022, CO₂ emissions were less than in FY2021 due to lower energy use in line with the decrease in production and the purchase of CO₂-free electric power.

SOx emissions, NOx emissions (Japan)



The Hodogaya Chemical Group has promoted the use of city gas as a fuel source for the Group's factories. The Group has continued to maintain zero SOx emissions since FY2012, having completed the switchover in FY2011. We also implement measures to limit NOx emissions into the atmosphere

Industrial waste generated, Final disposal amount (Japan)



The Hodogaya Chemical Group has set a target of generating less industrial waste than the previous fiscal year as a KPI in its Mid-term Management Plan. The total amount of waste generated and final disposal in FY2022 increased 27% and 63%, respectively, compared to the previous fiscal year. Notwithstanding the impact of certain factors, including differences in the composition of items produced, we take these increases very seriously and will strengthen efforts to reduce industrial waste

Research & Development

Responding to climate change • Ensuring the safety of products and chemical substance

Improving value and reliability of



Message from the Director of Research & Development

Kaoru Kasahara Director and Senior Managing Executive Officer

In its business strategy roadmap, the Company has set Electronics & Information, Mobility, Environment & Energy, Life Sciences, and Agriculture & Food Products as its target fields and will develop new products for these five fields. Under the Mid-term Management Plan SPEED 25/30, we will engage in R&D using a flexible approach while determining what 2030 will look like with a view to society in 2050 in the following specific business fields: cutting-edge electronic device materials, environmentally friendly dyes and polyols, bio-medical materials, and environmentally aware agricultural materials.

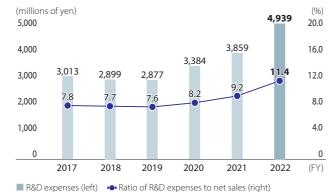
Basic Policy

We have formulated a 10-year scenario ideal figure for FY2030 and a target figure for FY2025 as an intermediate point. Our intermediate goal up to FY2025 is to develop and expand our current business areas by implementing necessary measures for OLEDs and expand and develop our business into new areas. To achieve the goal, we will quickly identify the constantly changing needs of society and promote research and development that can quickly respond to the different needs of various customers.

The Hodogaya Chemical Group gives form to the skills and know-how from the technology we have cultivated over our long history to develop products and production technology with all-new functions. We also engage in research and development to become a corporation that contributes to establish a sustainable society by means of our original portfolio and environmentally friendly manufacturing, with a focus on

specialty products. We will encourage innovation by creating specialty products to help achieve SDG goal 9 (Industry, Innovation and Infrastructure).

R&D expenses



Progress of the Mid-term Management Plan

Basic Strategies in SPEED 25/30

Further development of strategic products while fostering new ideas

- New business creation and growth for functional colorants
- Take new research projects into—and beyond—the development

Strenathen our R&D structure

- Expand our sustainable creation of new research projects
- Establish an organizational structure able to swiftly move from research to mass production

Further Development of Strategic Products while Fostering New Ideas

By applying the technology we have accumulated over the past 100 years, we aim to continue expanding and developing our strategic products under our Mid-term Management Plan SPEED 25/30.

We will also conduct research and investigations to establish

R&D strategies based on a long-term perspective with the keywords Electronics & information, Mobility, Environment & energy, Life sciences, and Agricultural & food products centered on the New Product Exploration Project. The goal is to create new businesses for the next generation, put in place a system in which R&D, production, and sales functions make a

three-pronged effort to respond speedily to the needs of customers. We will collaborate with the newly reorganized Organic & Optical Device Materials Department to strengthen our activities in the Electronics and Information field, and we aim to expand the biotechnology field in Life Sciences.

We are also actively promoting joint frameworks with industry, government, and academia and working to build next-generation basic technologies and create new businesses.

Strengthen Our R&D Structure

The Hodogaya Chemical Group promotes cutting-edge R&D for the future with a global R&D system that extends from Japan to overseas.

With the Tsukuba Research Laboratory in Japan as the main center, the R&D departments of each plant and Korean group companies, SFC CO., LTD. and HODOGAYA CHEMICAL KOREA CO., LTD., work together to promote R&D and guickly respond to customer requests.

Promoting an Intellectual Property Strategy

As far as our future business portfolio is concerned, we are promoting the prompt filing and acquisition of intellectual property rights based on R&D results. Based on information searches and patent analyses, we are also currently focusing on improving the quality of patents by using patent maps and intellectual property education. Going forward, we will continue to secure patent rights in Japan and overseas to accommodate global business expansion.

Newly Constructed SFC Biotechnology Building

SFC CO., LTD. (HQ; Korea, Hereafter SFC) is currently constructing a new biotechnology building with R&D and production facilities, which includes some head office functions, in Chungbuk, Korea, for the purpose of further expanding its biotechnology business.

Sales of diagnostic oligo products (materials for PCR diagnostic kits) provided by SFC substantially increased, following their PCR diagnostic kit application for several COVID-19 variants. Diagnostic oligo products developed, manufactured, and marketed by SFC are expected to expand in the future while shifting to the pharmaceutical Oligo sector. Specifically, applying the technology cultivated in the R&D and manufacture of diagnostic oligo products, we aim to produce products in the sector of nucleic acid medicine, the next generation of pharmaceuticals.

The market for pharmaceutical oligos (nucleic acid medicines) is expected to expand globally, and we intend to develop it as a second pillar after the OLED business so that it contributes to the growth of the Hodogaya Chemical Group.



CIE VOICE

Contributing to Business Development by Steadily Securing Intellectual Property Rights

The Intellectual Property Office is mainly responsible for carrying out application procedures and work to acquire rights to ensure that the technologies, products, and brands developed benefit the Company.

My areas of responsibility encompass the practical application of patents and trademarks. Practical patent application gives me access to new technologies and products within the Company. Practical trademark application allows me to be involved in the selection of product names for market launches.

In addition, my position requires not only technical and legal expertise, but also communication skills because the Intellectual Property Department has many opportunities to coordinate with internal and external parties, including technical departments, business departments, and patent offices. For this reason, I strive daily to explain specialized legal systems and techniques in an easy-to-understand manner.

Obtaining rights to patents and trademarks is often not easy, but I intend to make every effort to achieve patent rights and, in turn, contribute to business development.



Mari Toriya Research & Development

Relevant Group company: Hodogaya Contract Laboratory Co., Ltd. Description of business: Contract based custom synthesis, analysis and development Location: 45 Miyukigaoka Tsukuba City Ibaraki Pref. 305-0841 Japan TEL: +81-29-858-6886 (Main switchboard Webpage: http://www.h-contractlabo.co.jp/index-e.html



29

Environmentally Friendly Products and Technologies that Contribute to a Sustainable Future

Natural food dyes

Food dyes add color to food products and enrich our dietary life. Our natural food dyes are the products made from naturally-derived ingredients that come from nature.

Demand for these is growing steadily, driven by their safety for human consumption and their environmentally friendly nature. Some of our products have acquired Halal certification,

enabling us to meet the expectations of customers in Islamic countries.



Hydrogen peroxide

In addition to its traditional uses as a paper pulp bleach and industrial chemical, hydrogen peroxide is used as an oxidizing agent in the chemical oxidative decomposition method for decontaminating soil. It is possible to directly decompose oils in the soil through oxidation by injecting an oxidizing agent into or stirring it into contaminated soil.

Hydrogen peroxide, which breaks down into water and oxygen, is a clean, environmentally friendly oxidizing agent, and it is expected that broader application of it will be made in the future.



Bio-PTG (Polymer materials)

PTG, one type of polyol that is a polyurethane raw material, is an indispensable raw material for spandex and other products. With a proven track record of over 10 years, Hodogaya Chemical was the first company in Japan to develop and sell Bio-PTG, which possesses the same quality as traditional PTG but is environmentally friendly because the main raw materials

were switched from petroleum-derived ones to plant-derived ones. In addition, we are developing a special grade of plant-derived products.



Peracetic acid formulation

The peracetic acid formulation OXYATTACK (disinfectant agent for food products), a hydrogen peroxide derivative, was introduced into the market in 2017.

While having powerful anti-bacterial effects on vegetables, fruit and meat, it is broken down into acetic acid and water after use, and does not generate chlorine either, making it an environmentally friendly product that has won the approval of customers.



ODI (Phosgene derivative)

Octadecylisocyanate (ODI), a raw material for release agents, paints, and coating materials, is made from vegetable oil and fat, and meets the needs of customers from all over the world.

Because it is derived from vegetables, it helps control the occurrence of environmental CO₂, which is said to be a cause of climate change.



Oxygen supply materials (agricultural materials)

In recent years, extreme weather conditions, including torrential rains and typhoons have become more frequent with each passing year. In addition to the direct damage that these events cause to farmland, crop yield are also affected due to moisture damage. As

an application of hydrogen peroxide derivatives in the agricultural field, we provide customers with oxygen supply materials that promote healthy growth by supplying oxygen to soil harmed by bad weather and other factors, thereby improving the growing environment for crops as a countermeasure against moisture damage. These are also environmentally friendly products that do not contaminate farm land.





Business Overview of the Hodogaya Chemical Group



Functional Colorants Segment

https://www.hodogaya.co.jp/english/products/segment01/



Description of Business



Ability to embody the needs of customers

the DNA of the Group including our organic composite technology

in the global arena by making full use of

Lineup that makes it possible for total solutions via all the various types of OLED materials

Aluminum coloring dyes leading global market share

The world's "Only One" hair dyes

OLED Materials

Demand for OLED materials is growing because of their use in displays for smartphones, tablets and smartwatches, and they are also expected to be introduced for TVs and automotive applications. The materials for PCR diagnostic kits have been rated highly, including reporter, quencher dyes, and probes. The materials were developed independently by the Hodogaya Chemical Group as an application of OLED material technology, and the Group is expanding into new fields.

Imaging materials

They are essential for copiers and printers to function, helping to enhance precision in the office automation environment.

Dyes and colors

Our products, developed with unique technologies, are highly regarded as high-quality products in Japan and worldwide. (Mainly used for aluminum coloring, stationery ink, hair dyes, color filters, etc.)

Natural food dyes

Play an important role in making food appear more appetizing by adding color to food products. As a pioneer in this field, the Hodogaya Chemical Group contributes to culinary performances that enhance the enjoyment and deliciousness of food. Natural dyes are also used for coloring mainly home appliances, expanding its environmentally friendly applications.

Basic Strategies in SPEED 25/30

OLED materials

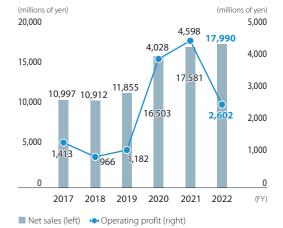
Expand sales through new product development and further globalize operations by establishing new overseas bases

Aluminum coloring dyes Expand sales through development of environmentally friendly products Bio business expansion Expand from diagnostics applications to therapeutic applications

Progress of the Mid-term Management Plan

- Sales of OLED materials are increasing due to the expansion of applications for OLED displays and their adoption in new products. We will work to further enhance our research and development as competition with competing companies is highly intense, and high performance and low cost are required.
- While demand fell for the materials for PCR diagnostic kits, developed as an application technology for OLED materials, we will work to expand from diagnostic pharmaceuticals to other medical fields.
- We are stepping up efforts to bring environmentally friendly products for aluminum coloring dyes to the market.
- In this segment, we will reorganize certain product lines and accelerate efforts to build a new portfolio.

Net sales / Operating profit



Related Group company: SFC CO., LTD.

Description of business: Manufacturing and sales of OLED materials and bio materials

Location: 89, Gwahaksaneop 5-ro, Ochang-eup, Cheongwon-gu Cheongju-si, Chungcheongbuk-do, Korea 28122 Webpage: https://sfc-dye.com/?page_id=18997



Business Overview of the Hodogaya Chemical Group



Specialty Polymers Segment

https://www.hodogaya.co.jp/english/products/segment02/







Basic Chemicals Segment



Description of Business

Ability to deliver specialty products to global markets by making full use of our phosgenation technology, etc.

Urethane materials that make full use of world-leading organic composite technology

Environmentally friendly waterproofing materials free of specified chemical substances

Polymer materials, pharmaceutical intermediates and specialty fiber materials leading global market share

Polymer materials

Polymer materials consist mainly of a material called PTG, which is required to give urethane ductility and elasticity (characteristics like those of rubber). Urethane is used in many fields, including clothing, automotive parts and leisure products. In addition, we are focusing on Bio-PTG, whose main raw materials were switched from petroleum-derived to plant-derived, as a product that possesses a quality similar that of the traditional PTG but is environmentally friendly.

Construction materials

The mainstay of construction materials is urethane waterproofing. Our urethane waterproofing materials are used widely to waterproof the roofs of office buildings, schools, and multi-story parking buildings of large-scale retail facilities.

Specialty chemicals

Specialty chemicals include intermediates and additives, fully using our organic composite technology and unique phosgenation technology accumulated over many years. We supply products tailored to customers' specific requests in various fields such as pharmaceuticals and cosmetics.

Creativity to explore new applications based on the hydrogen peroxide production technology accumulated over many years

Experience and knowledge on hydrogen peroxide production accumulated over 50 years

R&D expertise to produce peracetic acid, veterinary medicines, and various derivatives

Creativity to explore new applications such as soil improvement to protect the global environment

 Hodogaya Chemical has been engaged in the development, manufacturing and sales of hydrogen peroxide and its derivatives for over 50 years.

 Hydrogen peroxide decomposes into water and oxygen, and this property supports our everyday lives as clean and environmentally friendly products for a variety of uses. Hydrogen peroxide has been used for paper pulp bleaching and industrial chemicals, but in recent years, we have aggressively expanded the sales into new fields such as veterinary medicines.

Derivatives of hydrogen peroxide include sodium percarbonate and peracetic acid. Sodium percarbonate is used for bleaching agents and detergents. As for peracetic acid, we were the first in Japan to obtain approval for the production for use in food production applications, and we are working to accelerate its use.

Basic Strategies in SPEED 25/30

Launch new polyols into the market

Promote green chemistry by switching all PTGs to plant-derived

escription of Business

Develop and capture orders for new customized products using phosgene derivatives

Progress of the Mid-term Management Plan

- For polymer materials, we will promote green chemistry, such as further development of environmentally-conscious biobased PTG, which is a raw material of urethane, and launch new polyols.
- Sales of materials are performing well in the construction materials business. We will aim to increase sales of the products launched in 2019.
- The specialty chemicals business saw robust sales of products for pharmaceuticals and release agents. We are planning to increase the capacity of our facilities.

Net sales / Operating profit



Basic Strategies in SPEED 25/30

Hydrogen peroxide Expand for semiconductors and new fields Peracetic acid Expand food additive uses

Hydrogen Conduct basic studies in preparation for the advent of a hydrogen society

Progress of the Mid-term Management Plan

- Hydrogen peroxide sales increased mainly owing to price pass-throughs, although demand for pulp and paper and industrial chemicals applications declined.
- We believe the impact of soaring raw material and fuel prices will continue. However, we aim to improve business earnings by promoting various cost reductions and to acquire new customers and increase sales of peracetic acid for food additives, potentially opening up new markets.

Net sales / Operating profit



Related Group company: **Hodogaya Construction Products Co., Ltd.**

Description of business: Manufacturing and sales of construction products

Location: 1-9-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-0021 Japan TEL: +81-3-6852-0478 (Main switchboard) Webpage: http://www.hodogaya.co.jp/hcp/ (Japanese only)

Related Group company: KATSURA SANGYO CO., LTD. Description of business: Sales and marketing of chemical products Location: 1-9-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-0021 Japan TEL: +81-3-6852-0490 (Main switchboard)





Business Overview of the Hodogaya Chemical Group



Agro-Science Segment

https://www.hodogaya.co.jp/english/products/segment04



Description of Business





Logistics Segment

https://www.hodogaya.co.jp/english/products/segment05/



Description of Business



Ability to develop attractive products based on our formulation techniques

> Herbicides for home gardening leading market share in Japan

Strength to constantly propose new products to the market

R&D expertise to develop areas other than herbicides such as agricultural oxidizers

 The products offered by the Agro-Science segment are used in a wide range of fields, from controlling weeds to insect pest management and environmental conservation for cropland, living environments, railways, forests, and golf courses.

- Using a variety of intermediates, primarily those developed in-house, we have continued to develop new formulations that combine ease of use with safety and that are tailored to the needs of the location and the customer. In particular, we have a world-leading market share in herbicides used for home gardening and in green space management.
- In order to improve soil environments that have deteriorated as a result of weather conditions, and other factors, we are manufacturing oxidizers for use as soil improvement agents that can lead to stable production of crops, and working on developing this market.

Ability to transport security and safety based on its expertise on handling hazardous substances and chemicals

Hazardous substance handling know-how accumulated as Japan's first manufacturer of caustic soda

Storing and transporting services that draw on the locational advantages of Yokohama, Koriyama, and Nanyo

Provide door-to-door services tailored to our customers' needs

• The logistics business of the Hodogaya Chemical Group has been handling hazardous substances and chemicals for over a century. Drawing on this extensive expertise, it offers services highly regarded by customers in various fields beyond the chemical industry.

- We have large-scale facilities in Yokohama, Koriyama and Nanyo. In particular, the Yokohama Branch is conveniently located close to Japan's leading port of Yokohama and is used by many customers as a base for imports and exports. Our Koriyama and Nanyo distribution sites also offer storage and transportation services optimized for chemical products, heavy cargo, machinery and plants.
- In October 2021, the Nanyo Branch launched a business involving the storage and heating business handling ISO tank containers for hazardous and toxic materials, which is unique in

Basic Strategies in SPEED 25/30

Reinforce expansion into the field of herbicides for non-croplands

Expand use to the field of agricultural materials made from hydrogen peroxide and its derivatives

Reinforce production capabilities for agricultural material products

Progress of the Mid-term Management Plan

- Sales declined due to a drop in demand for herbicides for home gardening, but we will work to introduce attractive products to regain market share while maintaining profitability.
- In the field spanning the Basic Chemicals and Agro-Science segment, we will jointly develop a new composite agricultural materials involving oxygen supply materials using hydrogen peroxide from Hodogaya Chemical and compost from Asahi Agria Co., Ltd., and will be looking into commercialization going forward as important measures for new business areas: environmentally friendly agricultural materials in the business strategy roadmap of the Mid-term Management Plan SPEED 25/30.

Net sales / Operating profit



Basic Strategies in SPEED 25/30

Provide and reinforce storage services in a wide range of fields Further expand the international logistics business

Expand ISO tank container storage, heating business

Progress of the Mid-term Management Plan

- The volume of exports handled remained solid with the resumption of economic activities in Japan and overseas.
- As a logistics business for chemical manufacturers, we started operating an ISO tank container storage business in October 2021, utilizing our expertise in handling hazardous and toxic materials. We are taking the initiative to acquire more customers.

Net sales / Operating profit



Related Group company: Hodogaya Logistics Co., Ltd. Description of business: Warehousing and logistics

Location: 1-9-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-0021 Japan TEL: +81 3-6852-0520 (Main switchboard) Webpage: http://www.hodogaya.co.jp/hlc/ (Japanese only)



Related Group company: **HODOGAYA UPL Co., Ltd.** Description of business: Manufacturing and sales of agricultural chemicals Location: 1-9-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-0021 Japan TEL: +81-3-6852-0500 (Main switchboard)

Webpage: http://www.hodogaya-upl.com/ (Japanese only)



Related group company: **HODOGAYA AGROTECH Co., Ltd.** Description of business: Manufacturing and sales of agricultural chemicals Location: 1-9-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-0021 Japan TEL: +82-3-6852-0510 (Main switchboard) Webpage: http://www.hodogaya-agrotech.co.jp/ (Japanese only)





Global Expansion of the Hodogaya Chemical Group

We constantly strive to meet global customer needs through the expansion of our overseas network

The Hodogaya Chemical Group is enhancing its overseas bases to respond to the diverse needs of global customers. We have already established our subsidiaries in North America, Europe, and China, which are our primary markets. In the field of OLED materials, we invested in a South Korean company with a high level of technical expertise, and we have put in place a system in which the R&D, production, and sales functions make a three-pronged effort to respond speedily to the needs in the Asian regions with high potential.

As a result of expanding exports from Japan and working on expanding our overseas network, our overseas sales of imaging materials, such as charge control agents for toners and dyes for aluminum coloring of mobile devices, have increased steadily. Hodogaya Chemicals' sales of OLED materials remained robust

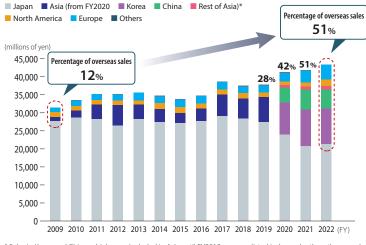
along with the expansion of applications for OLED products. Also, sales of materials for PCR diagnostic kits, developed independently by a Korean subsidiary as an application technology for OLED materials from FY2020 under the COVID-19 pandemic, increased. In addition, the overseas sales ratio for the Hodogaya Chemical Group rose to 51% because of strong sales of urethane materials that we focus on as an environmentally friendly products using bio-based raw materials, release agents and other polymer materials, and specialty chemicals, including phosgene derivatives.

The Group will respond to customer needs in Japan and overseas by constantly providing high-quality products and services, taking advantage of its unique technological capabilities and global networks in all fields.

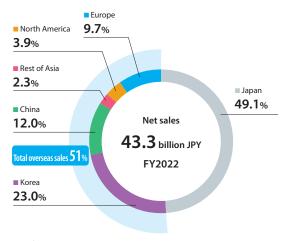
[Korea Business Strategy Office]

With the growing importance of the Korea business to the entire Group, we established the Korea Business Strategy Office on July 1, 2023 to flexibly and efficiently consider and promote business strategies for further growth of our business in Korea.

Trends in the Hodogaya Chemical Group's net sales by region



Net sales composition by region of the Hodogaya Chemical Group



^{*} Sales in Korea and China, which were included in Asia until FY2019, are now listed independently as these markets have increased in importance.

☐ VOICE

Contributing to the Hodogaya Chemical Group from the cutting edge of sustainability

Involved in analyzing business profitability as well as project management in the Business Promotion Department, I am currently working for HODOGAYA CHEMICAL EUROPE GmbH, based in Düsseldorf, Germany. Sales activities are of course important, but with Europe at the forefront of efforts to address sustainability concerns, including the environment and SDGs, I make it a point to provide useful information to our head office in Japan in a timely manner. In recognition of our efforts to address customer requests, we received the Silver Medal from EcoVadis, an external evaluation organization, in FY2022. In addition to this evaluation, recognition by EcoVadis has been extremely well received by customers, which in turn is contributing to increased sales. I will continue to provide cutting-edge information from Europe and work to improve the sustainability of the Hodogaya Chemical Group.



Jun Ebisui HODOGAYA CHEMICAL EUROPE GmbH