

# Essential Chemicals & Plastics

## Businesses

**Polyolefin Business**  
Polyethylene, Polypropylene

**Methyl Methacrylate (MMA) Business**  
MMA Monomer, MMA Polymer, MMA Sheet

**Licensing and Catalysts Business**



## Strengths of the Essential Chemicals & Plastics Sector

Our bases in Japan and Singapore develop high value-added products that anticipate customer needs and provide a stable supply of high-quality products. Our strength lies in the relationships of trust we have cultivated over the years with our blue-chip customers in the Asian market. At our Saudi Arabian base, we manufacture cost-competitive products by utilizing inexpensive raw materials and fuels.

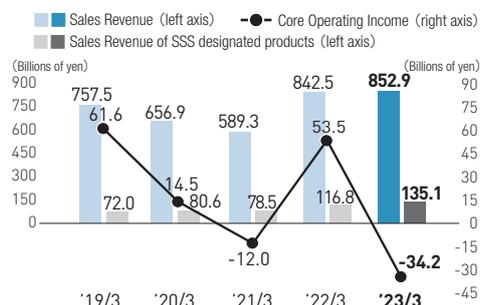
## Initiatives in FY2022

In addition to the decision to install pilot facilities for the commercialization of material recycling using waste plastics obtained from end-of-life vehicles, we also started operation of a demonstration facility for chemical recycling of acrylic resin at our Ehime Works thereby promoting efforts to realize a recycling-oriented society. In addition, we established a flexible manufacturing and sales structure by launching a new MMA Division and centrally managing Japan and Singapore. At the same time, we are working to improve our business structure by withdrawing from the caprolactam business.

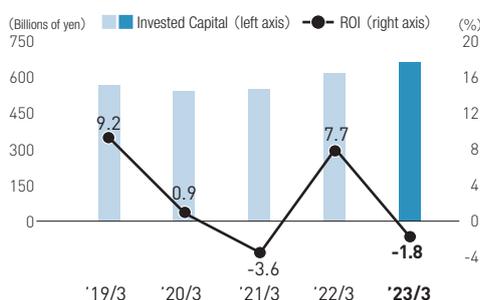
## Future Initiatives

We will transform our business portfolio with an awareness of green transformation (GX) and develop carbon neutral technologies, including material recycling and chemical recycling, to accelerate their implementation in society. In addition, we will shift products from existing businesses to high value-added products, optimize production in Japan and Singapore, and engage in external collaboration with a view to carbon neutrality. The Saudi Arabian business will continue to be a cash cow, so to speak, and we will strive to ensure stable operations.

## Sales Revenues and Core Operating Income/ Sales revenue of SSS designated products



## Invested Capital・ROI



## Transition to date

Despite the suspension of ethylene production facilities at the Chiba Works and efforts to lift the completion guarantee and stabilize operations for the second phase of the Rabigh project, ROI has fluctuated widely due to volatile petrochemical market conditions. As for invested capital, investments other than business maintenance are limited, but have increased since FY2021 due to high raw material prices and other factors.

## Future Measures and Issues

We will focus on licensing and the catalyst business, etc., to achieve high added value independent of market conditions, and promote integrated management of Japan and Singapore (product portfolio, optimization of polyolefin production), external collaboration, and business restructuring.

### Activities aimed at becoming Carbon Neutrality

We will make various efforts to become carbon neutral including collaborations with other companies and academia.

**Major Initiatives**

- Expand material recycling business
- Pursue technology development in chemical recycling

→ P.43 Contribute to Recycling Resources

Progress

- Started a business alliance with REVER.
- Completion of PMMA chemical recycling demonstration facility, plans to begin providing samples in the fall of 2023
- Meguri® brand product certification

Our Website : Circular System for Plastics Website

### Secure stable revenues via licensing and catalyst business

In accordance with the following three basic strategies, we aim to achieve both stable earnings and sustainable business expansion, while contributing to the realization of carbon neutrality in society.

#### Basic strategy

| Establish stable revenue base  | Expand portfolio  | Brush up technology  | Progress |  |
|--|---|--|----------|--|
| <ul style="list-style-type: none"> <li>• Expand capacity to supply catalysts</li> <li>• Expand opportunities to contact potential customers</li> </ul> | <ul style="list-style-type: none"> <li>• Quickly establish technologies that reduce environmental impact, expand lineup in license</li> <li>• Diversify business models through operational support services</li> </ul> | <ul style="list-style-type: none"> <li>• Bolster competitiveness in processes</li> <li>• Extend catalyst life and improve costs</li> </ul> |          |  |

- Start contacting potential licensees
- Promote website renewal and marketing enhancements

Our Website : Technology Licensing Website

### Bolster competitiveness via unified operations with Singapore

By combining the strengths of the two centers—Japan as the center of R&D and Singapore with its huge infrastructure and customer network—we will further enhance the competitiveness of each business and accelerate the social implementation of carbon neutral technology.

**Major Initiatives**

- Review and evolution of MMA, polyolefin business, etc.
- Implementation of Japanese carbon neutral technology using Singapore's infrastructure

Progress

- Optimized production and sales balance by establishing MMA Division
- Started to study the optimization of polyolefin production

### Direction of medium- and long-term initiatives in Japan and Singapore

|                     | Japan   | Singapore  |
|---------------------|---|--|
| CN                  | Accelerate development of technologies that reduce environmental impact   | Deploy technologies into society   |
| Existing businesses | <p><b>Exit unprofitable businesses</b></p> <p>After caprolactam, continue to study exiting or shrinking low-profit businesses, focus on businesses that are not affected by market conditions, such as licensing businesses.</p>  | <p><b>Production optimization</b></p> <p>Study production optimization in Japan and Singapore with the aim of maximizing earnings</p>              |
| Collaboration       | <p><b>Tri-party collaboration in Keiyo<sup>1</sup></b></p> <p>Begin joint studies on fuel conversions and recycling</p> <p><b>Keiyo Coastal Industrial Complex Council on Carbon Neutrality</b></p> <p>Study how to realize a carbon neutral industrial complex that is internationally competitive</p> | <p><b>Discussions with Singaporean government (EDB)</b></p> <p>Accelerate technology studies at PDH and CCUS<sup>2</sup> with support from EDB</p> |

<sup>1</sup> Maruzen Petrochemical, Mitsui Chemicals and Sumitomo Chemical    <sup>2</sup> PDH: Propane Dehydrogenation. CCUS: CO<sub>2</sub> capture, utilization and storage

## Status of Global Expansion

# Global Expansion Using the Strengths of Each Location

The Essential Chemicals & Plastics Sector has three major production locations: Japan, Singapore and Saudi Arabia.

### Japan and Singapore

In addition to producing and selling products primarily aimed at customers in Japan, our facilities serve as centers for research and development, developing new technologies and high value-added products while also undertaking initiatives aimed at reducing environmental impact. In addition, as the core of our licensing business, our facilities in Japan also handle not only technology development, but also production, sales, and other duties relating to catalysts.

On the other hand, the Singapore base produces ethylene and propylene at PCS\*1, polyethylene and polypropylene at TPC\*2. Sumitomo Chemical Asia produces MMA. We have developed high value-added products and produced stable supplies of high-quality products in Singapore for many years, building extremely strong relationships of trust with customers, while creating high brand value in the Asian market.

By integrating the operation of these two bases, we will review and evolve the structure of our business including MMA, polyolefin and others. We will also utilize the Singapore base to put into practice the carbon neutral technology developed in Japan.

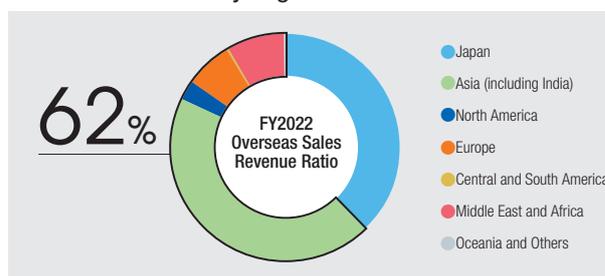
### Saudi Arabia

Petro Rabigh, a joint venture with Saudi Aramco, produces all sorts of petrochemical products. The strength of the Rabigh business, as shown on the next page, is its cost advantage due to utilizing ethane. We are focusing on stable production in order to maximize this advantage.

\*1 PCS Pte. Ltd. (affiliated company)

\*2 The Polyolefin Company (Singapore) Pte. Ltd. (consolidated subsidiary)

### Sales Revenue Ratio by Region



## Q&A

### Q : As the movement to reduce environmental impact expands, what is the strategy of the Essential Chemicals & Plastics Sector?

**A:** We will promote GX-conscious transformation of our business portfolio and contribute not only to our own reduction of greenhouse gas (GHG) emissions but also to society's reduction of GHG emissions through the development and commercialization of superior technologies for reducing environmental impact. In addition, we aim to generate continuous profits through licensing of these technologies and related catalyst business. Already in progress is a business alliance with REVER to commercialize material recycling and product certification for the recycled plastic brand Meguri®.

#### License / Catalyst

##### Propylene Oxide (PO)-only Process

The PO-only process, developed by Sumitomo Chemical, is the world's first successfully commercialized cumene-based PO-only production process, based on utilizing cumene recirculation. The process produces no byproducts, and when combined with a proprietary developed high-performance epoxidized catalyst, provides high yields, reduced energy costs, and high operational stability. This sort of technology license contributes to reducing environmental impact even outside of Sumitomo Chemical's factories.

##### Catalyst Business

Sumitomo Chemical conducts development and sales for high-performance catalysts that maximize the effects of licensed technologies and contribute to reducing environmental impact. Because these catalysts can be expected to secure stable returns in addition to reducing GHG emissions, we are focusing on expanding this business.

#### Technological Development

##### Material Recycling and Chemical Recycling

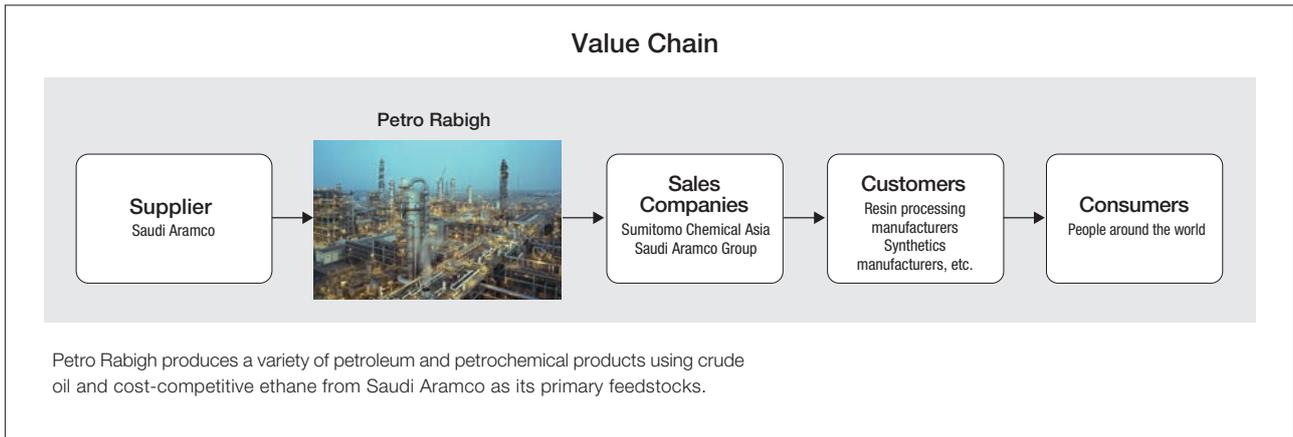
We are working to develop and commercialize material recycling technology, which turns waste plastics and other wastes back into resources that can then be used in new products, and chemical recycling technology, which chemically converts trash and waste plastics into the raw materials used for new plastics.

→ P.43 Contribute to Recycling Resources

##### Effective Use of CO<sub>2</sub>

Within our petrochemical complex in Singapore, we are considering combining propane dehydrogenation (PDH) technology, which produces propylene from propane, with a CO<sub>2</sub> fixation technology that synthesizes methanol very efficiently, using CO<sub>2</sub> as a raw material, alongside the hydrogen produced as a byproduct of the PDH process. If this initiative succeeds, this could be a new breakthrough that can both reduce environmental impact, by reducing the amount of CO<sub>2</sub> emitted from chemical plants and other facilities, and also improve economic performance by increasing the production of certain products.

## Value Creation Model: Rabigh Business

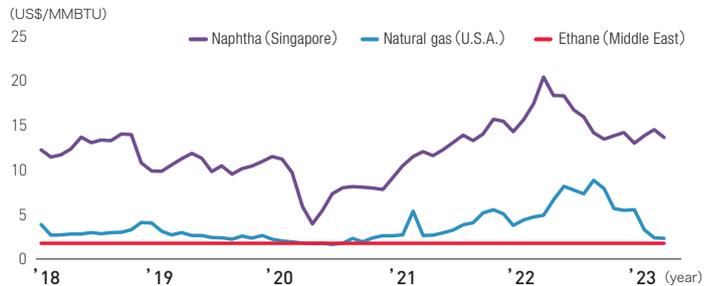


## System for Providing Added Value

### Competitive Advantages of Rabigh Business

Procuring ethane from Saudi Aramco as the main feedstock offers outstanding cost competitiveness, as raw material prices can be fixed at lower levels compared to competitors using naphtha as feedstock, and margins will expand as product prices increase, among other factors. In addition, it is the world's largest integrated complex, which leads to competitive advantages due to lower unit costs.

### Cost Difference of Petrochemical Feedstocks



### Major Processes Generating Competitive Advantages

Petro Rabigh produces a variety of petroleum and petrochemical products using crude oil supplied by Saudi Aramco and cost-competitive ethane as main raw materials. The company makes products such as PP, PE, and PO, using technology licenses from Sumitomo Chemical, which boasts world-class technology. Moreover, the local staffs' operational technique is improving by receiving training at overseas facilities, particularly in Singapore. Moreover, Sumitomo Chemical Asia, which handles sales, has facilities throughout Asia, shortening delivery times and reducing logistics costs.



Work in progress at Petro Rabigh

### Providing Customer Value

Because there are risks of obstructions to procurement in the Middle East region of Asia, where logistics can be unstable, customers have a strong desire for accurate and stable product delivery. By having inventory in locations close to customers, we can meet these needs by offering sales with more reliable and shorter delivery times than competitors, securing a high level of trust. In addition, while it has the flexibility to change a certain volume of sales and customers according to market conditions in each region, by focusing more on continued sales to core customers, the company further increases the reliability of its stable supply. Through these efforts, Sumitomo Chemical Asia is working to build long-term relationships with customers.

## Added Value Provided to Society

### Contributing to Reducing Environmental Impact by Using Cutting-edge Technology in Plants

Petro Rabigh uses the breakthrough, environmentally friendly PO-only process to produce PO, which, compared with conventional production processes, reduces CO<sub>2</sub> emissions by 300 thousand tons of CO<sub>2</sub> for an annual production volume of 200 thousand tons of PO. We not only produce stable supplies of a product essential for society, we also use energy and resources efficiently throughout the plant with this sort of cutting-edge technology, thereby contributing to reducing environmental impact.



# Energy & Functional Materials

## Businesses

### Advanced Polymers Business

Liquid crystal polymer (LCP), Polyether sulfone (PES)

### Specialty Chemical Business

Resorcinol, Plastic additives, Emulsions

### Inorganic Materials Business

High-purity alumina, Low soda alumina, Aluminum hydroxide, High-purity aluminum

### Battery Materials Business

Battery Separators, Cathode materials



## Strengths of the Energy & Functional Materials Sector

We believe that our strengths lie in our product lineup that meets diversifying customer needs, including separators for lithium-ion secondary batteries with the world's highest level of heat resistance, super engineering plastics used in various applications including electronic components, and products such as high-purity alumina and resorcinol that maintain the top global market share, as well as our R&D capabilities and evaluation, manufacturing and process technologies that create these product lines.

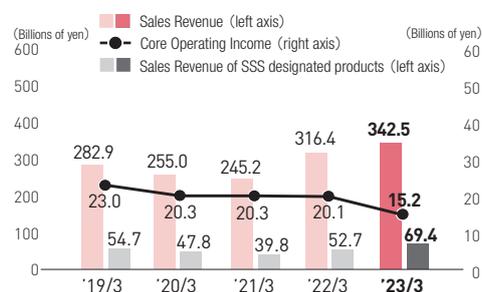
## Initiatives in FY2022

At the Ehime Works we started construction of a new facility for new high-performance grades of high-purity alumina. In addition, the Ehime Works is expanding its production capacity for LCP, for which demand is expected to grow against the backdrop of the spread of 5G and EVs. Both of these facilities are scheduled to start operation in FY2023. Moreover, we have successfully developed "soft solid-type batteries" in an industry-academia joint research program with Kyoto University and Tottori University and have made significant progress toward the early commercialization of safe solid-type batteries. On the other hand, due to the difficulty in securing stable earnings in the future, we have shut down its dyestuff manufacturing facilities at the Osaka Works and have withdrawn from this business. Furthermore, we have decided to withdraw from the S-SBR business in Singapore, and we have also terminated production of EPDM at our Chiba Works and plan to withdraw from this business in FY2023. We will allocate management resources to areas where we have a competitive edge and seek to upgrade our business portfolio.

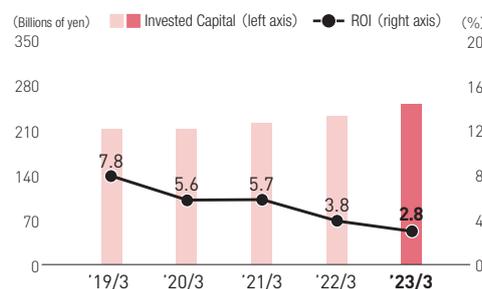
## Future Initiatives

We will concentrate our resources on growth businesses such as battery materials and super engineering plastics. In separators for lithium-ion secondary batteries we will respond to diversifying customer needs by leveraging our strengths in high safety and long life. In cathode materials, we aim to commercialize a highly productive calcination process. On the other hand, we will continue to assess the direction of low-profit businesses with a view to withdrawing from or downsizing them. As for next-generation businesses, we will develop new technologies for solid-type batteries, direct recycling of cathode materials, and separation membranes.

## Sales Revenues and Core Operating Income/ Sales Revenue of SSS designated products



## Invested Capital・ROI



## Transition to date

Core operating income had been stable at around 20 billion yen per year, but recently declined due to the global economic slowdown. Invested capital increased due to aggressive investments in super engineering plastics, battery components, and high-purity alumina, and ROI is trending downward. On the other hand, we are working to improve our business portfolio by making decisions to withdraw from the low-profit businesses of dyestuffs and synthetic rubber.

## Future Measures and Issues

In super engineering plastics, battery materials, and high-purity alumina, we will leverage our proprietary technologies to meet growing demand in the EV market and elsewhere, expand earnings, and ensure that our investments pay off.

**Concentrate investments and expand business in growth areas**

**Battery materials**

**Separators: Development, increase in production capacity and sales expansion in accordance with advances in battery capacity**

Demand for lithium-ion secondary batteries is expected to continue to grow, especially for automotive applications. We will respond to the rapidly expanding EV society with our accumulated technologies and promote further expansion of our separator business by increasing our production capacity to meet customer demand.

**Our Initiatives**

- Increase production capacity to meet the increasing demand for automotive, expand sales to new customers and pursue cost rationalization.
- Focus on expanding sales for consumer use like home appliances, electrically assisted bicycles.

**Cathodes: Expand sales of precursors, establish calcination technology and commercialize**

By establishing our proprietary high-productivity calcination process, we aim to enter the market for high nickel-content cathodes, which is expected to grow in the future.

**Our Initiatives**

- Launch validation equipment on schedule and acquire customer certification.
- Develop cobalt-free cathodes to help achieve a sustainable society.

**Super engineering plastics (LCP)**

**Expand business with increased production capacity. Expand sales into automotive and 5G high-speed telecommunications connectors**

With the shift to EVs, engine parts are decreasing while onboard connectors and EV motor peripheral parts are increasing. In addition, as 5G goes into full swing, demand for LCPs that matches the required characteristics is expected to increase. We will develop a production regime to meet such robust demand and focus on expanding sales in growth fields

**New facility to be operational in FY2023**

Approx. **9,000 tons** → **30% expansion**

**Our Initiatives**

- Considering further increase in production capacity
- Respond to automotive demand and expand sales of 5G high-speed telecommunication connectors

**Decide direction for low-profit business**

While giving maximum consideration to the impact on stakeholders, we will downsize or withdraw from businesses that we judge to be unprofitable in the future due to changes in the business environment and other factors, in an effort to improve the business portfolio.

**Our Initiatives**

- FY2021 Decided to withdraw from the EPDM business
- FY2022 Decided to withdraw from the dyestuffs business; decided to withdraw from the S-SBR business in Singapore

**Develop next generation business**

**Develop new technologies such as solid-type batteries and direct recycling of cathode materials**

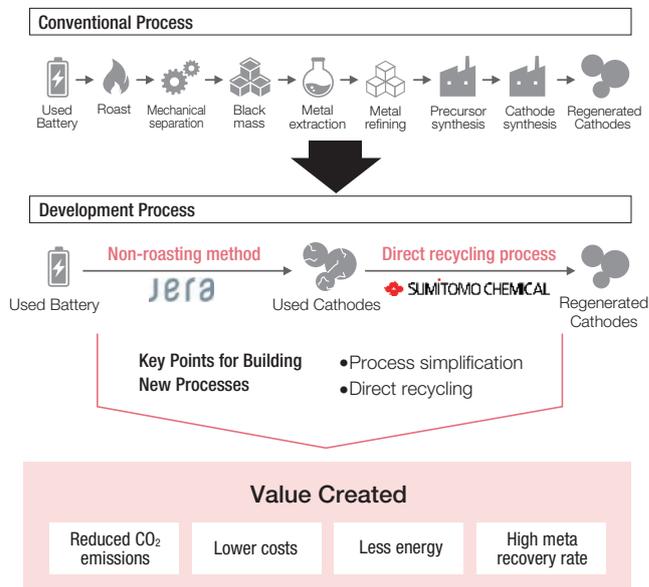
**Solid-type batteries**

Compared to current lithium-ion secondary batteries, solid-type batteries are safer and are expected to become the next generation of batteries. In an industry-academia joint research program we have succeeded in developing a soft-solid electrolyte, which had been a challenge. We will continue our development efforts for early commercialization.

**Direct recycling of cathode materials**

We are developing a technology to recycle recovered lithium-ion secondary battery cathode materials as cathode materials again without returning them to metal. JERA Co., Inc. and we were selected for NEDO's "Green Innovation Fund Project: Development of Next-Generation Storage Batteries and Next-Generation Motors". Both companies will promote development of the recycling technology and social implementation.

**Key Points of New Process Construction and Value Creation**



## Status of Global Expansion

### Expanding our Business to Quickly Meet Customer Needs

In the Energy & Functional Materials Sector, Sumitomo Chemical has marketing functions in local group companies such as Sumika Electronic Materials (Shanghai) Corporation and Sumitomo Chemical Europe S.A./N.V., for efficient sales activities with a technical suggestion in order to promptly respond to the needs of overseas customers. For example, one of the sector's core businesses is super engineering plastics, for which over half of shipments are to China and other overseas customers. Using our molecular design technology and design support technology which leverages the characteristic of materials, we propose solutions that meet customer needs. In the future, we are considering further strengthening such overseas sales organization, including through alliances with other companies.



Super engineering plastics

## Q&A

### Q : What kind of future developments are you thinking about for the separator business?

**A:** Because of the impact of stricter environmental regulations in countries, the scale of the market for environmentally friendly vehicles is projected to expand to sales of over 40 million vehicles in 2030, and demand for separators will expand accordingly.

There are two main issues to address for environmentally friendly vehicles to become widespread. The first is cruising distance, and lithium-ion secondary batteries are continuing to evolve, primarily with expanded capacity. Under such situations, the requested characteristics of separators are being further raised, and there is an increasingly broad scope for leveraging the superiority of aramid coatings. The other major issue is cost, and there is a need to



Separators

#### ■ Strategy and Areas of Focus for Global Expansion

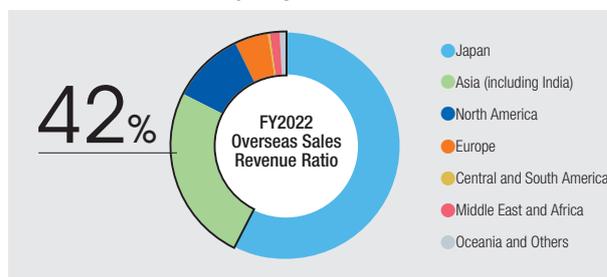
##### LCP

- Develop a value chain in Europe and the US
- Maintain and expand our share of the connector market, primarily in China

##### PES

- Expand share in artificial dialysis membrane applications, primarily in Asia and the US
- Expand use in high-performance membrane applications, such as for pharmaceutical companies

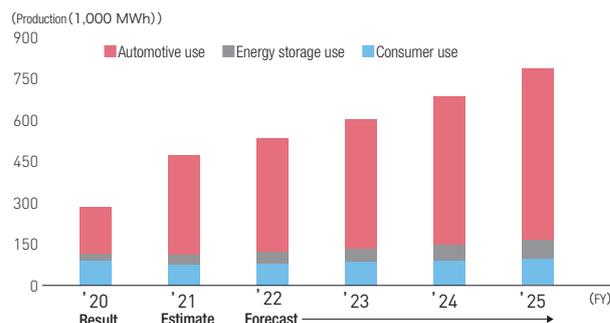
#### Sales Revenue Ratio by Region



significantly reduce the price of lithium-ion secondary batteries, which account for over half of a vehicle's cost. There is also a strong demand to reduce the cost of separators, and competition is becoming more severe with the emergence of Chinese manufacturers. Accordingly, we are rethinking the materials used and the manufacturing process in order to significantly reduce costs.

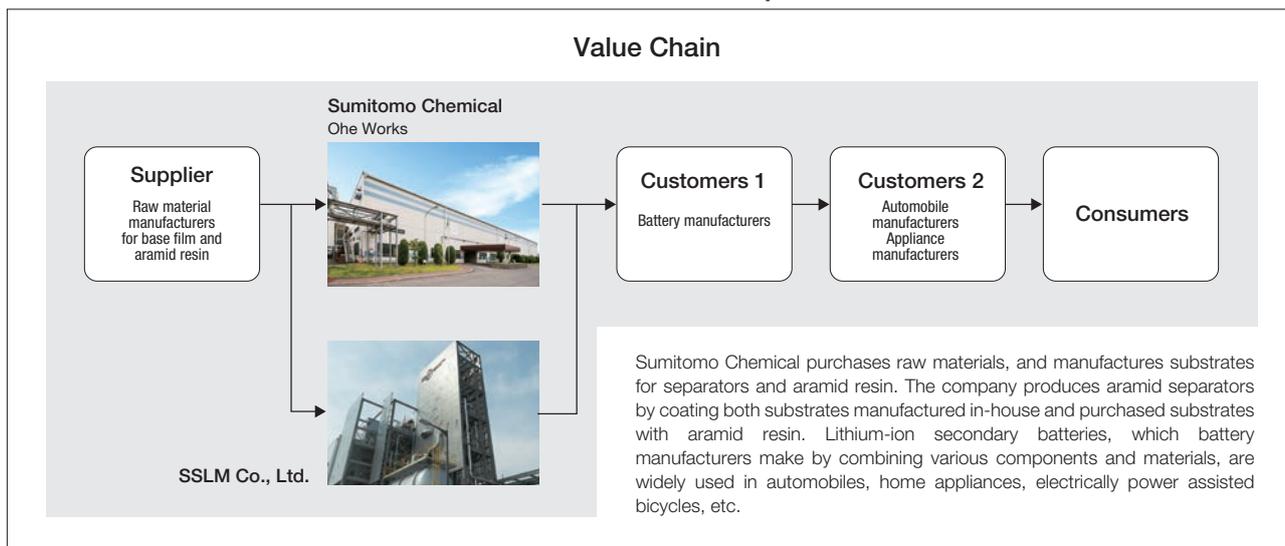
In addition to these initiatives, in order to meet a dramatic expansion in future customer demand, we are quickly expanding our production capacity and promoting an expansion of our separator business.

#### Market Forecast for Lithium-ion Secondary Batteries



(Note) Automotive use: EV/HEV/PHEV applications; Energy storage use: Uninterruptible power supplies and base transfer stations; Consumer use: Small-scale consumer applications  
(Source) Fuji Keizai Co., "General Survey of Battery-related Market Conditions – Battery Cells Market," 2022 edition

## Value Creation Model: Separators



## System for Providing Added Value

### Sumitomo Chemical's Competitive Advantages

The use of coated separators has become mainstream for lithium-ion secondary batteries. Among separator coatings, there are mainly ceramic coatings and aramid coatings, and almost all producers of separators are making ceramic coating separators. Compared to other companies' products, our aramid coating separators were used earlier in automobiles, and they have a track record for many years as high-quality and high-performance separators. Besides, they have superior safety (heat resistance), and they have been made lighter, weighing just kilograms for each electric vehicle, delivering customers added value that is different from other companies. In order to further strengthen the superiority of our aramid separator, we are conducting research to enhance the strength of the separators and reduce their thickness.

### Major Processes Generating Competitive Advantages

We are not only conducting research and development of separators but also working on improving productivity. We are capable of applying a uniform aramid coating with industry-leading speed, while maintaining high quality. Productivity at the plant of SSLM in South Korea has tripled since 2015 due to factors such as more advanced techniques, accumulated experience, and improvements in coating equipment. We expect further productivity improvement in the future.

### Providing Customer Value

Customers and consumers need EVs and other environmentally friendly vehicles with a long cruising range, and for that type of environmentally friendly vehicle, it is essential to implement high-quality, high-performance batteries. Our direct customers, the battery manufacturers, seek to manufacture batteries that provide that performance at the lowest possible cost. For that reason, we provide high-safety (heat resistant) separators, and we are working to improve productivity to be able to provide products with superior cost competitiveness. We also periodically communicate with customers to hear what new needs they have, and then work to develop products that can meet those needs.



## Added Value Provided to Society

### Contributing to Realize a Sustainable Society through the Separator Business

With more rigorous environmental regulations being put in place all over the world, the shift to environmentally friendly vehicles like EV is accelerating. Environmentally friendly vehicles loaded with lithium-ion secondary batteries can reduce CO<sub>2</sub> emission while driving as compared with gasoline cars. Separators are essential components in creating highly safe lithium-ion secondary batteries, and are indispensable for environmentally friendly vehicles to gain ground. Sumitomo Chemical contributes to realizing a sustainable society through its separator business.



# IT-related Chemicals

## Businesses

### Display-related Materials Business

Polarizing films, Color resists, Touch-sensor panels, Polymer light-emitting materials, etc.

### Semiconductor Materials Business

Photoresists, Processing chemicals for semiconductors, Compound semiconductors, Aluminum targets, etc.



Deliver new value that responds to the growth in the ICT industry by combining our material development capabilities with our optimization technology.

松井 正樹

**Masaki Matsui**

Representative Director & Senior Managing Executive Officer

## Strengths of the IT-related Chemicals Sector

We have been working to build a market-oriented global supply chain, utilizing it to develop and supply products. In addition to this development and supply system, we are able to provide high value-added products by combining multiple materials and technologies that only an integrated chemical manufacturer can offer. Another of our strengths is our ability to develop products in borderline areas by making full use of the know-how we have accumulated through our technologies and quality response in both the display and semiconductor fields.

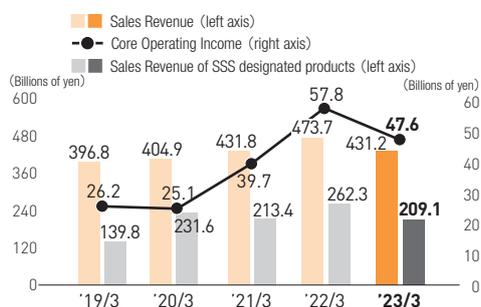
## Initiatives in FY 2022

We have decided to construct a new plant for semiconductor process chemicals in the United States. As a strategic base for this business in the U.S. market, we aim to expand the business by capturing robust demand. The new plant is scheduled to start operation in fiscal 2024. By expanding the production system of process chemicals for semiconductors on a global scale and providing a stable supply of high-quality products, we will contribute to the realization of a smart society and smart mobility.

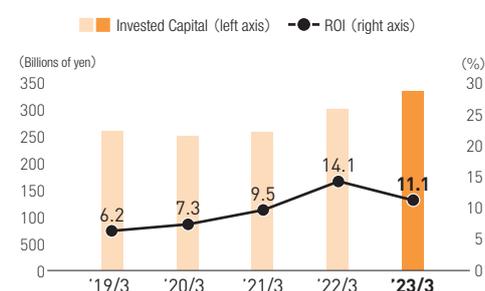
## Future Initiatives

In the display-related materials business, we will further increase the ratio of high value-added products such as materials for OLED displays by utilizing our core technologies, and try to develop and launch materials for next-generation displays. In the semiconductor materials business, we will develop and expand sales of advanced materials for silicon semiconductors that respond to customers' process innovation, while steadily capturing growing demand. For compound semiconductors, we aim to commercialize next-generation power device materials that contribute to solving social issues such as energy saving. In terms of new business development, we will focus on the development of materials for next-generation high-speed communications and high-sensitivity image sensors, while actively collaborating with external parties.

## Sales Revenues and Core Operating Income/ Sales Revenue of SSS designated products



## Invested Capital・ROI



## Transition to date

ROI has been above the hurdle rate since FY 2019 due to semiconductor-related investment returns and favorable conditions in display materials. In addition, due to further semiconductor-related new construction expansion, invested capital has been on an upward trend since FY2021.

## Future Measures and Issues

We will accelerate structural reforms because the competitive environment has changed for polarizing films, which used to be a major product of the sector. In addition, we are taking steps toward the next stage of growth, such as establishing a U.S. base for semiconductor process chemicals and developing a compound semiconductor materials business structure, and we will ensure that the results will lead to higher sales and profits.

Basic Policy

We create new core technologies and products by adding our unique wisdom, technology, experience, and network to existing core technologies.

Policies by Business Area

**Display-related materials** Maintain competitive advantage by leveraging our own core technologies

Focus on materials for high-end TVs, OLED smartphones, automotive and next-generation displays by differentiating technologies and quality.

Our Initiatives

- Secure market share in existing high value-added Fields
- Capture demand for materials for next-generation displays
- Continue restructuring of commodity LCD materials business

Materials for Next-generation Displays



Foldable/Rollable Displays



Next-generation large displays



Micro Displays for AR/VR Devices

Polarizing Films for Automobile



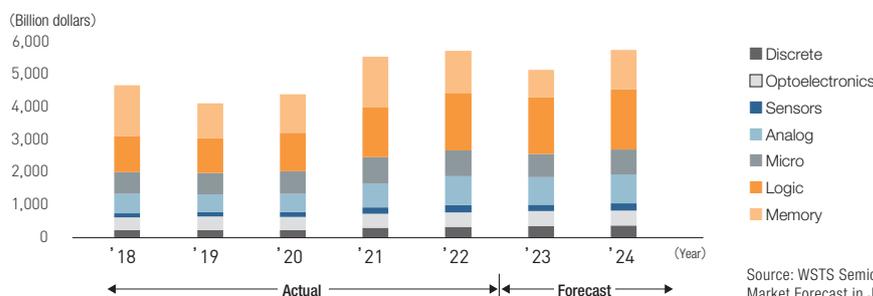
**Silicon semiconductor materials** Capturing business opportunities in response to market expansion

We will ensure to capture the demand that is expected to steadily expand for the coming several years in the context of increasing CAPEX of data centers to accommodate DX, full-fledged deployment of 5G communications, and electrification/autonomous driving. We have decided to build a new plant for semiconductor process chemicals in the U.S., and we are taking measures to capture growing demand, such as the operation of a semiconductor photoresist development and evaluation facility for cutting-edge processes at our Osaka Works.

Our Initiatives

- Securely capture growing demand
- Develop products that support innovations in customer processes

Semiconductor Market Trends



Source: WSTS Semiconductor Market Forecast in June 6, 2023

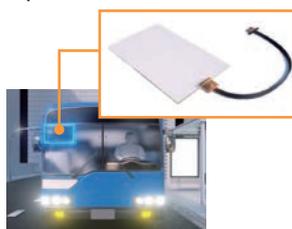
**New businesses** Creation of new businesses for the next generation

We aim to establish the third business by the late 2020s, following the display-related materials business and the silicon semiconductor materials business. In the power device field, we have begun production of large-diameter gallium nitride substrates and will work to further increase diameter and productivity.

Our Initiatives

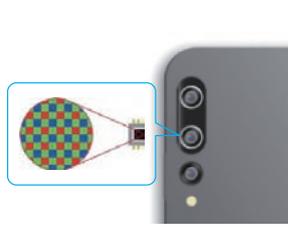
- Establish business in materials related to Telecommunications and sensors
- Launch next-generation power device materials business and contribute to evolution in energy saving technologies

Repeater for mobile communications



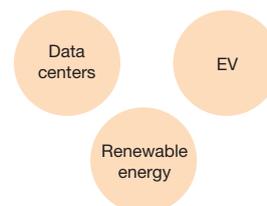
These are transparent, thin antennas that can be mounted on the windshields of cars. They are compatible with 5G high-speed communication and contribute to improving the communication environment in public transportation and expanding the communication area of mobile devices.

Image sensor-related materials



Materials related to image sensors for smartphone cameras, automotive and security applications. They contribute to higher sensor performance, such as higher sensitivity and pixel counts.

Next-generation power device materials

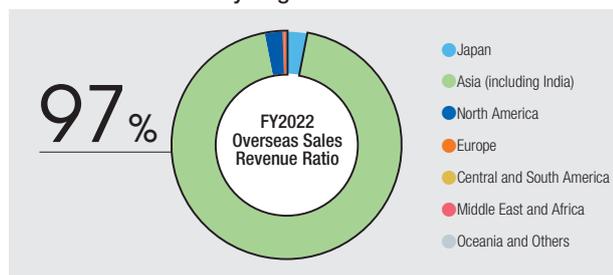


Gallium nitride substrates for next-generation power devices. It can reduce the size and loss of power conversion circuits used in data center servers, wind power generation, EVs, and other applications. It contributes to carbon neutrality through energy saving.

## Status of Global Expansion

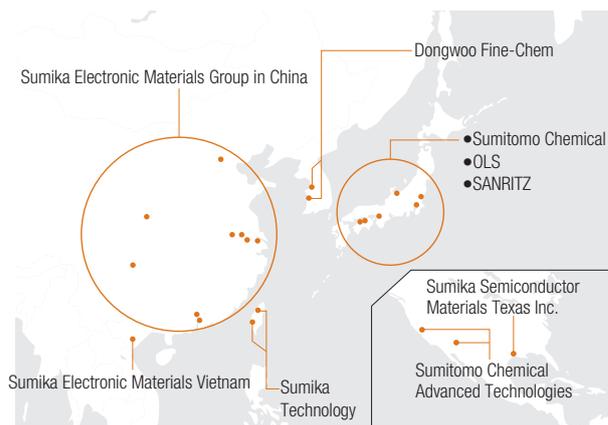
### Building a Market Oriented Supply Chain

Sales Revenue Ratio by Region



We have worked to build a market oriented global supply chain, building good relationships with customers by establishing our production facilities close to customer manufacturing facilities, comprehending their needs and developing/supplying products as quickly as possible. Specifically, the Sumika Electronic Materials Group in China has many facilities, which conduct their businesses in such a way as to respond to the needs of their respective customers. In addition, we have decided to construct a new plant for semiconductor process chemicals in the U.S. in FY2022, further strengthening our global production system. This structure is one of the strengths of our company. The sector's overseas sales revenue has been increasing year by year as a result of its

business network, especially in East Asia and the U.S., where the display and semiconductor industries are concentrated. In Japan, we manufacture mainly display materials at our Ohe Works and semiconductor materials at our Osaka Works in addition to compound semiconductors at our Ibaraki Works. In addition, the company owns SANRITZ CORPORATION which has strength in the automotive polarizing film business.



## Q&A

### Q : What specific actions are you taking to reliably capture demand for semiconductor materials?

**A:** In the semiconductor market, demand is expected to grow for cutting-edge semiconductors going forward, due to background factors such as the evolution of artificial intelligence (AI) technology and the full-scale commercialization of next-generation communication systems (5G). With the expectation that EUV lithographic exposure, a new type of light source, will become dominant in this field, there will be demand for photoresists suited for even greater miniaturization in pattern formation.

#### Our Strengths

We have established advanced product design and evaluation technologies based on organic synthesis technologies cultivated in our various fine chemical businesses, and have expanded our business by leveraging our ability to respond to customers in a timely manner through the consolidation of manufacturing, research, and sales centered on the Osaka Works area. In particular, we have a high global market share in photoresists for immersion ArF lithographic exposure, which is mainly used in the formation processes of miniaturized circuits, due to our performance advantages and

reliability in quality. In addition, we not only expect to increase shipments of photoresists for EUV lithographic exposure, to align with the mass production schedule of major customers that have decided to adopt our products, we are also continuing development of new EUV photoresists to accommodate even greater miniaturization needs for securing future orders.

#### Specific Actions

In FY2019, we completed a new plant for cutting-edge photoresists, which began operations in FY2020. In addition, to strengthen the development and evaluation system for semiconductor photoresists for cutting-edge processes, we constructed a new building at our Osaka Works which started operation in fiscal 2022. We plan to continue strengthening our production system for semiconductor photoresists for cutting-edge processes on a global basis. The semiconductor market is expected to continue to grow continuously due to the further acceleration of data communication speed and capacity, and we are considering further reinforcement of our system in anticipation of long-term demand.

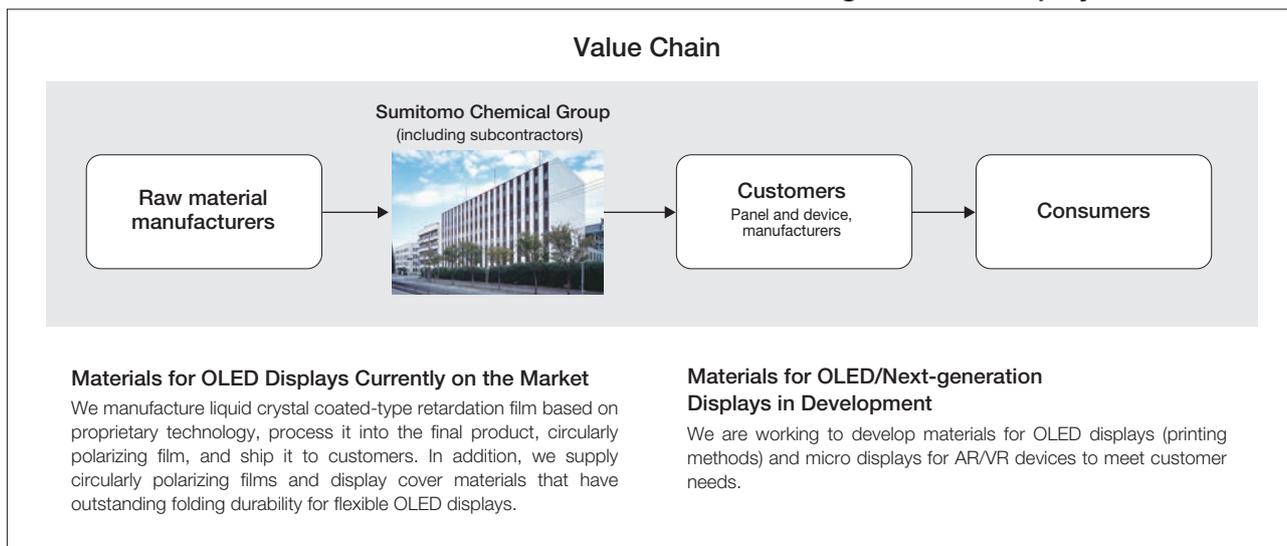
### Aiming for Dramatic Business Expansion

**Semiconductor Business Sales Revenue: 1.5 times\* by the Mid-2020s**

(Including photoresists, processing chemicals for semiconductors, and compound semiconductors)

\*Compared to results for FY2021

## Value Creation Model: Materials for OLED/Next-generation Displays



## System for Providing Added Value

### Sumitomo Chemical's Competitive Advantages

Our unique strength is in the liquid crystal material used in circularly polarizing film for OLED displays. Our proprietary liquid crystal materials have excellent functions in preventing reflections of sunlight, lighting, and other light and in expressing a clear black color without color change, regardless of the angle from which the screen is viewed, thereby contributing to the realization of high-definition OLED displays.



### Major Processes Generating Competitive Advantages

In order to develop retardation and polarizing functions using liquid crystal materials, the liquid crystal molecules must be systematically oriented in a specific direction. We are working to develop molecular designs that will achieve this sort of optical performance. Moreover, we are also manufacturing liquid crystal materials in-house, and optimizing optical designs for circularly polarizing film suitable for the various OLED displays of TVs and smartphones.



### Providing Customer Value

The market is highly interested in creating next-generation displays. The level of development demand is high. To reach the level of development requirements from our customers, we are proposing high-functionality materials, for flexible OLED displays, multi-functional flexible materials that realize foldable and even rollable displays, for large-sized OLED displays, polymer light emitting materials that will lead to improved display quality and lower production costs, and even for ultra-small, ultra-fine next-generation displays applicable for AR/VR/MR glasses, color conversion materials that will enhance the optical characteristics of them through quantum dots or color photoresists technologies.



## Added Value Provided to Society

### Creating More Abundant and Convenient Daily Lives for People

Displays are the interfaces between people and ICT and will continue to evolve alongside changes in people's lifestyles and the progress in communications technology, part of the infrastructure of society. In addition to displays that provide even better portability or even more realistic viewing experiences, new displays, which are indispensable for technologies such as mixed reality, are being developed actively and these technologies even might change the nature of peoples' experiences. By developing and producing materials and components for OLED displays and next-generation displays, Sumitomo Chemical is contributing to the creation of new items that have never existed before, and thereby creating more abundant and more convenient daily lives for everyone.



# Health & Crop Sciences

## Businesses

### Agrosolutions Business

Crop protection chemicals, Biorationals, Fertilizers, Rice, etc.

### Environmental Health Business

Household pesticides, Disease control insecticides, Products for controlling tropical diseases, Veterinary drugs, etc.

### Feed Additives Business

Methionine

### Pharma Solution Business

Active pharmaceutical ingredients for small molecule drugs, Nucleic acid medicine, etc.



## Strengths of the Health & Crop Sciences Sector

We globally distribute not only excellent crop protection chemicals developed in-house, but also unique crop protection and enhancement products such as biorationals and post-harvest with high market shares. The strength of our crop protection business is in our lineup of unique products and the research and development capability that created it, as well as our global sales network. Moreover, in our methionine business, Sumitomo Chemical offers a stable supply, with integrated production from raw materials using advanced production technology. In the pharma solution business, we supply active pharmaceutical ingredients and intermediates and provide technology by utilizing our advanced organic chemical synthesis technology and quality assurance system.

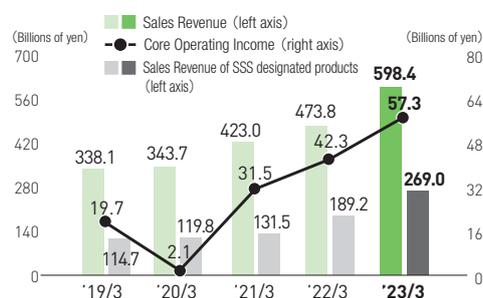
## Initiatives in FY2022

We have received registration approval in Brazil, the world's largest country of soybean production, for our soybean fungicide EXCALIA MAX™, which contains the novel active ingredient INDIFLIN™, and have begun full-scale sales. In the South American region, the world's largest crop protection chemicals market, we intend to further expand sales of this product. In the biorational business, in addition to the expansion of the research center and the U.S. plant, we built a new organization in the U.S. and began selling directly, thereby strengthening each function of the manufacturing, sales, and R&D. Furthermore, with the acquisition of FBSciences Holdings, Inc., a U.S. company engaged in the business of biostimulants, which are naturally-derived agricultural materials, we have made a full-scale entry into the market and will continue to expand our business.

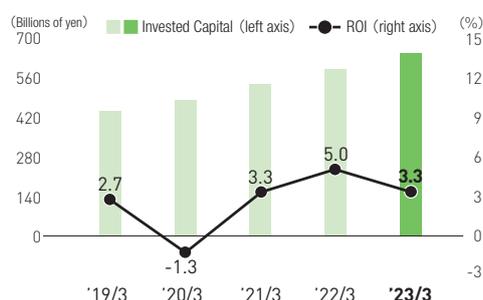
## Future Initiatives

We will continue to manage our business operations with an awareness of one of the sector's long-term visions, which is to expand our sustainable products business. In the biorational and botanical business, where we are strong, we will continue to work on further business expansion in each region and strengthening the functions of our global manufacturing and sales and R&D. In chemical crop protections, we will focus on maximizing sales of new large-scale products such as INDIFLIN™ (a fungicide for soybean rust), while developing and launching products with more emphasis on reducing environmental impact. In addition, we will strengthen our supply chain, which has expanded through business acquisitions in South America, and aim to improve capital efficiency by steadily recovering the results of our investments. In R&D, we will invest resources with emphasis on business areas where we have strengths and actively utilize open innovation.

## Sales Revenues and Core Operating Income/ Sales revenue of SSS designated products



## Invested Capital・ROI



## Transition to date

This sector is a future growth driver, and we have continued to invest aggressively in this sector. FY2022 and beyond will see the full effect of the South American acquisitions, while the deteriorating market for methionine is weighing on the market.

## Future Measures and Issues

We are on a growth trajectory through global footprint expansion (India and South America) and development of new crop protection chemicals. We have also made a full-scale entry into the biostimulant field and will ensure PMI while also securing a vehicle for future growth.

## Business portfolio reforms aimed at strengthening a group of sustainable products

In addition to biorational products, that utilize ingredients derived from natural products, such as microbial-based crop protection products, environmental health products, plant growth regulators, and rhizosphere microbial materials, we will differentiate ourselves from our competitors by leveraging our technologies and product lines in areas where we have strengths, such as biorationals and botanicals, including the biostimulants\* area, which we enter in earnest in 2023. We will also promote the development and marketing of chemical crop protection with a stronger awareness of the need to contribute to the reduction of environmental impact.

\*Biostimulants: A group of naturally-derived agricultural materials and a class of biorationals that have the effect of drawing out the inherent strength of crops and soil

### Initiatives to Accelerate Biorational Growth

To accelerate the growth of biorationals, we will implement the following initiatives in each field, aiming to achieve 120 billion yen in consolidated sales of biorationals and botanicals in FY2030.

|                      |  |
|----------------------|--|
| <b>R&amp;D</b>       | <b>Accelerate development and launch in pipeline</b>   |
|                      | <ul style="list-style-type: none"> <li>Promote more than 40 projects planned for the current Corporate Business Plan</li> <li>Expand facilities at Biorational Research Center (BRC)</li> </ul>  |
| <b>Sale</b>          | <b>Strengthen sales capabilities</b>   |
|                      | <ul style="list-style-type: none"> <li>Utilize each region's Sustainable Solutions Business Unit</li> <li>Build a new organization in the U.S., and begin selling directly</li> <li>Expand sales of botanicals to the organic agriculture field</li> </ul> |
| <b>Manufacturing</b> | <b>Strengthen product supply capabilities</b>  |
|                      | <ul style="list-style-type: none"> <li>Expand the Osage Plant in the U.S.</li> <li>Utilize regional companies, such as Sumitomo Chemical Brazil</li> </ul>   |
| <b>Business</b>      | <b>Strengthen business management and expand business area</b>   |
|                      | <ul style="list-style-type: none"> <li>Simplify reporting lines and achieve agile allocation of management resources</li> <li>Pursue expansion of business sphere through acquisitions</li> </ul>  |

### Contribution to low environmental impact agriculture using crop protection chemicals

#### Contributed to the spread of no-till farming

No-till farming is an agricultural method of growing crops without tilling, and is attracting attention from the perspective of reducing greenhouse gas (GHG) emissions by contributing to the reduction of CO<sub>2</sub> emissions from the ground, in addition to its significant environmental benefits such as soil protection and organic matter conservation. We have several herbicides suitable for use before sowing crops, and we will contribute to the spread of this farming method by ensuring the convenience of no-till cultivation through the promotion of these herbicides.

| Product     | Initiatives, characteristics, etc.   | FY2024 sales revenue target |
|-------------|--|-----------------------------|
| Flumioxazin | <ul style="list-style-type: none"> <li>Superb long-lasting effect makes it possible to reduce treatment frequencies, and its efficacy against a broad range of weeds makes it suited to no-till farming</li> </ul> | 70+bn. yen                  |
| Rapidicil®  | <ul style="list-style-type: none"> <li>Fast-acting and plenty efficacious on low doses</li> <li>Its efficacy against a broad range of weeds makes it suited for no-till farming</li> </ul>                         | -                           |

### Utilization of seed treatments

Seed treatment is an application method in which the chemical is applied directly to the seed. By pinpointing the treatment to the seed, the amount of chemical required can be kept to a minimum, contributing to a reduction in environmental impact.

### Advances and efficiencies in R&D

We identify our focus areas and concentrate our resources in areas where we have strengths, while actively utilizing open innovation.

### Partners in the Food Field

Ginkgo Bioworks(synthetic biology), Nuritas(development of bioactive peptide for improving animal health and performance), Kansas State University, Danforth(soil health/carbon negative technology), Nufarm (joint development of mixture products), Bayer(development of next-generation weed control system), etc.

### Partners in the Healthcare Field

IVCC (development of innovative products and technologies for mosquitoes that transmit malaria and other vector-borne diseases), etc.

### Secure returns on investments already made

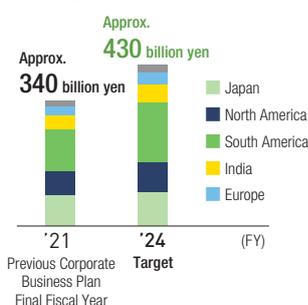
We will work to ensure the recovery of investments made, and aim to achieve ROIC that exceeds the cost of capital as soon as possible.

### Agrosolutions Business in South America

**August 2020:** Start of integrated operation of four acquired Nufarm South American subsidiaries and our existing affiliates in South America  
**May 2022:** Launch of EXCALIA MAX™, a fungicide for soybeans containing the new active ingredient INDIFLIN™ in Brazil



Sales revenue target for crop protection business (excluding environmental health business)



### Strengthen global supply chain

To maximize profits from our expanded global footprint, we will strengthen our supply chain to ensure consistent product quality and security of supply.

### Roll out Integrated Business Planning (IBP) framework



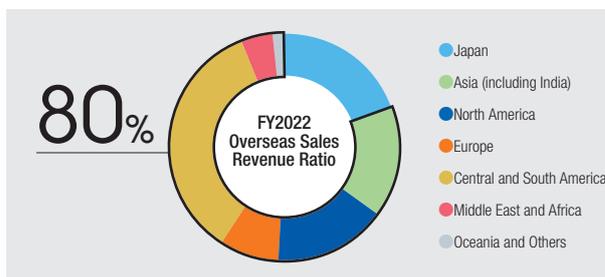
- Realize speedy decision-making based on financial information based on real-time information sharing and integrated management across the entire supply chain of production, sales, purchasing, and logistics.
- Expanding globally following South America

## Status of Global Expansion

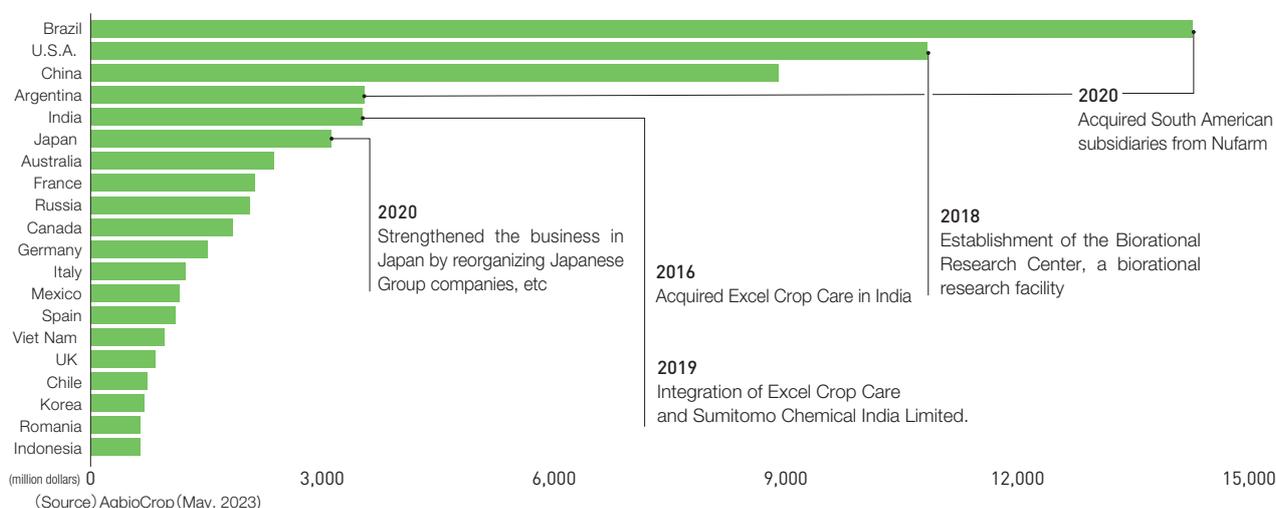
# Business development that responds immediately to customer needs

The global expansion of our crop protection business began in the early 1960s when we started exporting the pesticide Sumithion to North America. Since then, following on from the establishment of Valent U.S.A. in 1988, we have been building up research, production, and sales facilities around the globe. Because climate and crops vary widely depending on the region, we have built a system that enables us to develop products suited for a particular region, and to respond quickly to the needs of the region. We have been expanding our facilities in the world's major crop protection markets, including the U.S.A. and Europe, Asia, and South America, and of the countries with the six largest crop protection markets around the world, we are currently securing or strengthening our sales capabilities in five of them.

Sales Revenue Ratio by Region



Crop Protection Market Size (2022)



## Q&A

**Q : In recent years, the multinational crop protection companies have undergone a consolidation, and the gap between the scale of Sumitomo Chemical's crop protection business and that of the major companies is widening, so how do you plan to compete going forward?**

**A :** With the mergers of Dow and DuPont in 2017 and Bayer and Monsanto in 2018, two major players were born. At the moment, however, we have no plans to emulate them and merge with another company. We will employ the following three strategies to secure a place among our global competitors.

**■ Compete on Our Research and Development Capabilities**

Living things will inevitably develop resistances to crop protection products over the course of time. For this reason, it is necessary to continuously develop new crop protection products, and research and development capabilities are extremely important to achieve this. The number of patents we hold compares favorably with those of multinational crop protection companies, and we intend to compete going forward as a crop protection company based on our research and development capabilities.

→ P.53 Investors' Handbook 2023

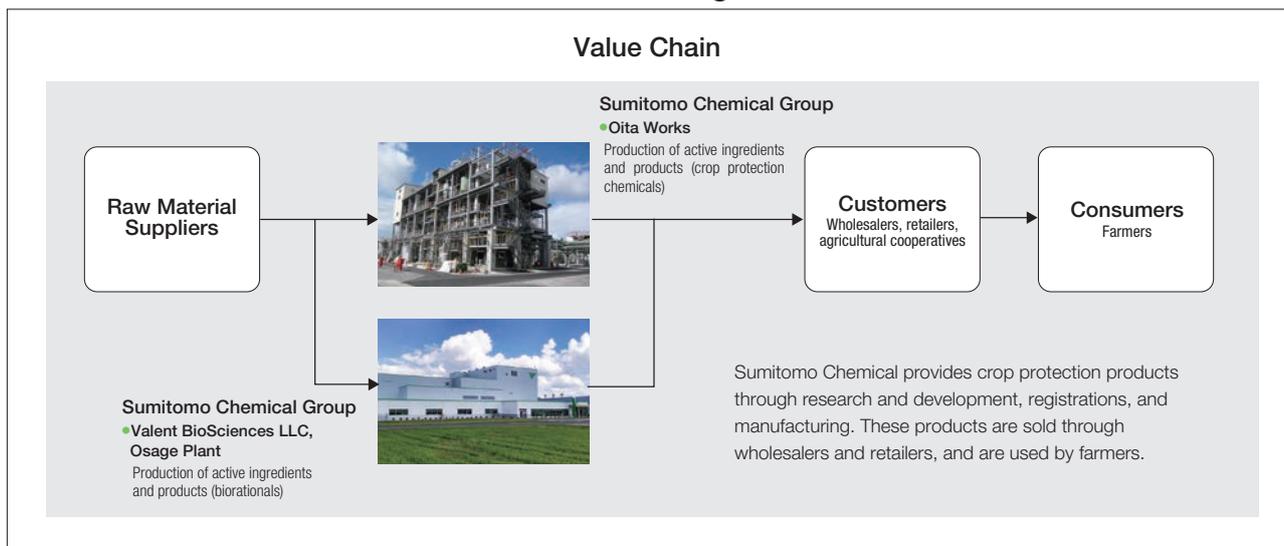
**■ Compete on Our Extensive Global Footprint**

Up until a few years ago, our global footprint did not measure up when compared with the major players, who have the ability to deliver products to all sorts of regions around the world. In recent years, however, in addition to our acquisition of Excel Crop Care in 2016, we also acquired the South American business of Nufarm in 2020, among other initiatives, making steady progress in our efforts to strengthen our global footprint. In addition, we are not only selling the crop protection products we have developed using our own global footprint, we are also selling them as part of pest control systems offered by multinational crop protection companies, enabling us to access an even broader range of regions.

**■ Leading the way in regenerative agriculture with a dual approach to biorationals and crop protection chemicals**

→ P.46 Contribute to the food supply advance sustainable agriculture

## Value Creation Model: Global Agrosolutions Business



## System for Providing Added Value

### Sumitomo Chemical's Competitive Advantages

There are many players in the global crop protection market, from multinational companies based mostly in the U.S.A. and Europe to comparatively small ones. Crop Protection products differ significantly in needs by region and crops. Sumitomo Chemical pursues unique positioning in various markets around the world, by using its product portfolio consisting of chemical and biorational products for crop protection and enhancement. We are undertaking new solution development from a long-term perspective, from the discovery of novel lead compounds to the product development for end-users, and the proprietary products and technologies derived from this process are the foundation of our competitive advantage.



Health & Crop Sciences Research Laboratory

### Major Processes Generating Competitive Advantages

In the discovery stage, which is important in developing new solutions, we search for active ingredients for new crop protection products. In this process, we evaluate not only a compound's efficacy but also its safety for people and the environment. We utilize our global research and development network so as to develop new solutions as soon as possible. In addition, in the product development for end-users, we are also putting effort into product development for new formulations and applications to add more value to existing active ingredients.



The technical guidance of biorationals

### Providing Customer Value

Farmers use crop protection products as they hope to improve the quality and yield of their agricultural crops. In addition, they also expect to make farming work more efficient, and improve profitability. At the same time, they also pursue safety and reliability of crops, hoping that the crop protection products will not harm either their health or that of the consumers of the agricultural products. For this reason, we provide unique, highly effective products that meet customer needs. By creating solutions that reflect the needs of each region or crop, we contribute to the creation of new sustainable agricultural techniques.



## Added Value Provided to Society

### Contributing to a Stable Food Supply by Improving Food Productivity

Plant growth regulators, one of the products of our overseas crop protection business, act to enhance the fruit-bearing ability of fruits and vegetables, increase their size, and improve their quality. As they can adjust the flowering and maturity periods, plant growth regulators can help crop cultivation even in cold and dry regions, and contribute to increasing food production in various regions around the world. In the face of an increasing world population and a growing world economy, there has been an increasing demand for safe and reliable food. We are increasing food productivity by globally supplying unique materials, and we aim to contribute to a stable food supply.



→ P.46 Contribute to the food supply advance sustainable agriculture

# Pharmaceuticals

Businesses

Prescription Drugs

Diagnostic Drugs

CDMO

(Contract Development and Manufacturing Organization) Business



## Strengths of the Pharmaceuticals Sector

In the prescription drug business, we have experience and knowledge in psychiatry & neurology and oncology, which are areas of high unmet medical need, as our priority disease areas. In the diagnostic drug business, our core competencies are our solid experience and technologies cultivated over 50 years. In addition, our ability to cooperate with Sumitomo Chemical Group to make the best use of the company's foundational technologies, including genome analysis and cell differentiation, is one of our major strengths.

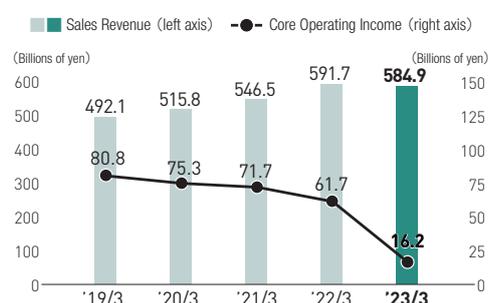
## Synergy of Business and Technology

Sumitomo Pharma has strong ties with Sumitomo Chemical in terms of its technological genealogy. For instance, Sumitomo Pharma's regenerative medicine/cell therapy business has its roots in safety research for crop protection products at Sumitomo Chemical. Sumitomo Chemical's Bioscience Research Laboratory has incorporated Sumitomo Pharma's genome technology to increase synergy in research and to cultivate new businesses. Furthermore, we have recently launched a CDMO business for regenerative medicine/cell therapy products, combining Sumitomo Pharma's knowledge of regenerative medicine/cell therapy with our knowledge of contract manufacturing. Moving forward, we will continue to generate the variety of synergy between pharmaceuticals and chemistry.

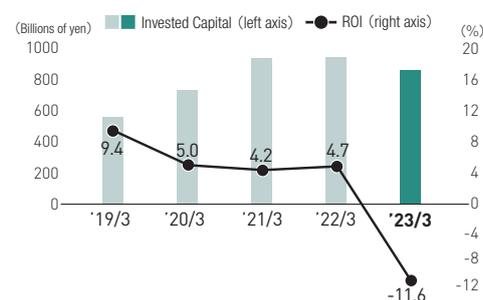
## Future Initiatives

Our top priority is to establish a revenue base after the end of LATUDA® exclusivity period in the U.S. ORGOVYX® (a treatment for prostate cancer), MYFEMBREE® (a treatment for uterine fibroids and endometriosis), and GEMTESA® (a treatment for overactive bladder) are positioned as our three key products and we are aiming for sales exceeding those of LATUDA® and maximizing the potential of the agents through alliances with other companies and expansion of indications. In addition, with an eye on medium- to long-term growth, we will focus on creating new products in the psychiatry & neurology area, as well as next-generation medicine such as regenerative medicine/cell therapy and Theranostics, and further strengthen the CDMO business, which is expected to grow.

## Sales Revenues and Core Operating Income



## Invested Capital • ROI



## Transition to date

Invested capital increased due to large acquisitions for post-Latuda, etc. ROI fell to negative in FY2022 due to the impact of the loss of U.S. exclusivity for LATUDA® as well as the impact of impairment losses associated with the discontinuation of development of low-performing products and items in development.

## Future Measures and Issues

We aim to achieve a V-shaped recovery toward FY2024 through further sales expansion of LATUDA® successor products and streamlining effects from the combination of subsidiaries in North America. In addition, we will expand our pipeline for future growth and build a stable earnings base by expanding peripheral businesses such as S-RACMO.

### Establishment of revenue base after the end of LATUDA® exclusivity in the U.S.

As post-LATUDA agents we will maximize revenues from ORGOVYX®, MYFEMBREE®, and GEMTESA®. In addition, the Company will also promote rationalization, including improvement of management efficiency and optimization of business costs, in order to become a business entity suitable for post-LATUDA.

#### Progress

- Received approval for an additional indication of endometriosis for MYFEMBREE® in the U.S.
- Myovant Sciences Ltd., (currently, Sumitomo Pharma America, Inc.) which handles ORGOVYX®, MYFEMBREE® became a wholly owned subsidiary.
- Consolidation of Sumitomo Pharma's North American subsidiaries into a single company
- Promote rationalization such as improvement of management efficiency and optimization of business costs (transfer of shares of Sumitomo Pharma's domestic subsidiaries, transfer of sales rights for respiratory drugs, etc.)

### Strategies for Medium- and Long-Term Growth

Looking ahead to what comes after ORGOVYX®, MYFEMBREE®, and GEMTESA®, we will continue to create new products in the psychiatry & neurology area. In addition, we will seek to maximize product value as quickly as possible by accelerating development and reducing risk, including the active use of external resources. Furthermore, we will achieve medium- to long-term growth by taking on the challenge of developing and commercializing new therapeutic methods, such as regenerative medicine/cell therapy, and Theranostics.

#### Progress

- Initiated clinical trials for two additional indications for ulotaront (adjunctive major depressive disorder and generalized anxiety disorder)
- Construction begins on a cGMP-compliant cell processing center in the U.S.

### Joint development and commercialization alliance with Otsuka Pharmaceutical Co., Ltd.

Ulotaront is a next-generation antipsychotic that has received Breakthrough Therapy\*1 designation from the U.S. Food and Drug Administration (FDA). In 2021, we agreed to co-develop and co-market ulotaront and other neuropsychiatric compounds with Otsuka Pharmaceutical, which has strengths in this area. We will leverage this alliance to develop the drug into a new blockbuster for medium- to long-term growth.

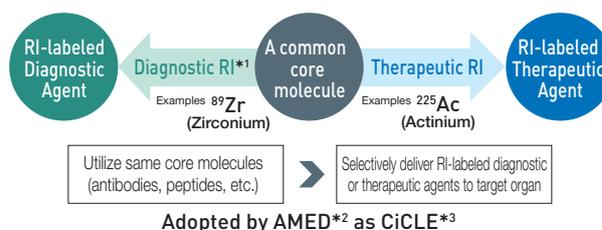
| Development products | Proposed indications                 | Scheduled to be launched          |
|----------------------|--------------------------------------|-----------------------------------|
| ulotaront            | Schizophrenia                        | (U.S.) FY2024*2<br>(Japan) FY2027 |
|                      | Adjunctive major depressive disorder | (U.S.) Late 2020s                 |
|                      | Generalized Anxiety Disorder         | (U.S.) Late 2020s                 |
| SEP-4199             | Bipolar I Depression                 | (U.S.) Late 2020s                 |

\*1 The U.S. FDA's program to facilitate the development and review of drugs for serious or life-threatening diseases

\*2 To be revised for launch target based on consultation with the FDA, etc.

### Theranostics

As a next-generation therapeutic approach, we aim to develop new radiopharmaceuticals that "integrate therapeutics and diagnostics (Theranostics)" by taking advantage of the characteristics of nuclear medicine. In the CRADLE building, our drug research facility, we are working diligently on research and development to deliver optimal medical care to patients as soon as possible.



\*1 RI: Radioactive isotope

\*2 AMED: Japan Agency for Medical Research and Development

\*3 CiCLE: Cyclic Innovation for Clinical Empowerment

#### Progress

- Successfully manufactured at an investigational manufacturing scale of <sup>225</sup>Ac
- U.S. FDA accepts Clinical Trial Application for NMK89 under development as a diagnostic agent

### Strengthen CDMO business

In the fields of next-generation pharmaceuticals such as regenerative medicine/cell therapy and targeted alpha-particle therapy, which are expected to show remarkable growth in the future, we will maximize the synergy between chemistry and pharmaceuticals to aggressively develop our CDMO business.

### S-RACMO Co., Ltd.

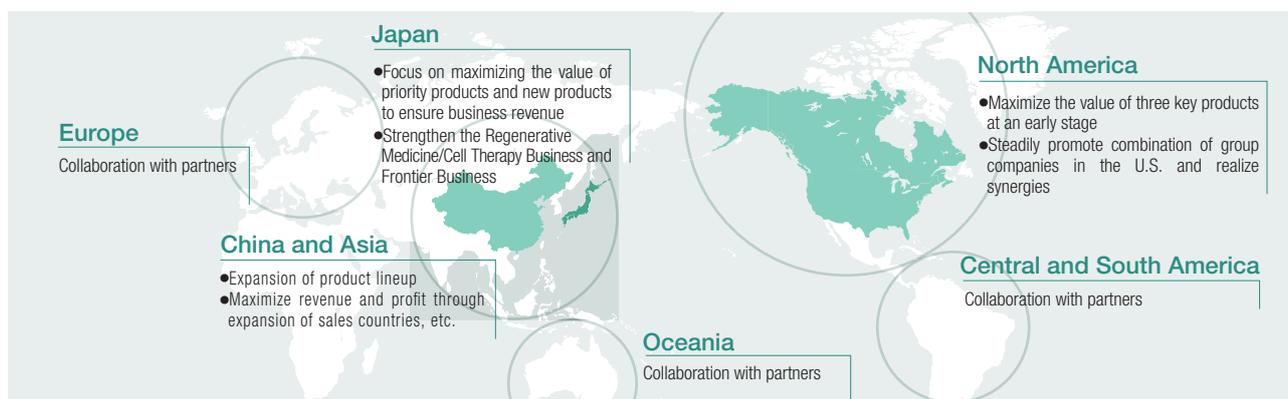
S-RACMO, a joint venture of both companies, conducts CDMO business in the field of regenerative medicine/cell therapy by combining Sumitomo Chemical's fundamental technologies for iPES cells and expertise in contract manufacturing of pharmaceuticals with Sumitomo Pharma's experience in advanced manufacturing method development and formulation development gained through multiple projects in the regenerative medicine/cell therapy business. Orders are steadily increasing at FORCE (Facility of Regenerative and Cellular Medicine Organization), a regenerative and cellular medicine manufacturing facility that began operations in 2022. We will continue to work to further expand our presence in this fast-growing field.



Facility of Regenerative and Cellular Medicine Organization (FORCE)

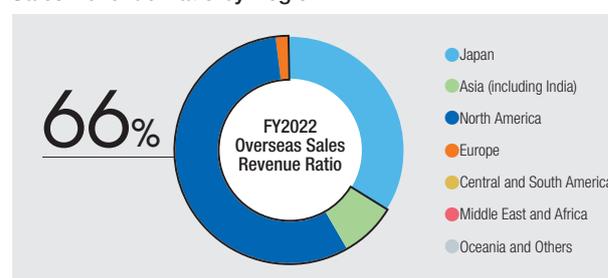
## Status of Global Expansion

### Regional Strategy Centering in Japan, North America and China



About 70% of the sales revenue in our Pharmaceuticals sector comes from outside Japan, and one of the features of our Pharmaceuticals sector is its global reach, centered in Japan, North America, and China. Although the ratio of overseas sales revenue is expected to decline temporarily in FY2023 due to the end of LATUDA®'s exclusive sales period in the U.S., we will not relax our efforts to achieve further growth by expanding our three key products and building new facilities for manufacturing regenerative medicine/cell therapy and we will re-grow revenue in the U.S., the country with the largest demand worldwide. In addition, growth in demand for pharmaceuticals throughout Asia has been significant, including China, which has the world's second-highest level of demand, so it is a region where we expect sustained growth going forward. Currently we are building our sales structure to increase our presence in the market, enhancing the capabilities of our subsidiaries and strengthening collaboration with local partners. For other regions, we plan to maximize revenue by collaborating with partners.

#### Sales Revenue Ratio by Region



## Q&A

### Q : Please tell us about your efforts to achieve a V-shaped recovery in FY2024.

**A:** We will strengthen profitability through further sales expansion and rationalization of our three key products (ORGOVYX®, MYFEMBREE®, and GEMTESA®). With regard to sales expansion of the three key products, we partnered with Pfizer Inc. in 2020 to co-develop and co-market ORGOVYX® and MYFEMBREE®, and last year, MYFEMBREE® was approved in the U.S. for an additional indication for the treatment of endometriosis. In addition, we have just strengthened our revenue base and accelerated our management speed by making Myovant, which handled ORGOVYX®, MYFEMBREE®, a wholly owned subsidiary. In this year, we will focus on further increasing awareness of the strengths of our three products, and will enhance the presence of our products by promoting them to a wide range of interested parties. In this way, we aim to achieve sales revenue of 200 billion yen for the three products in total in FY2024.

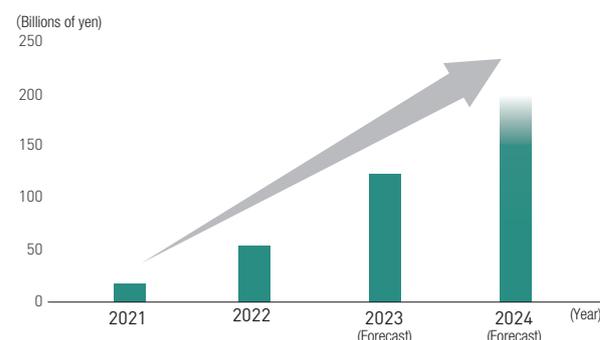
In rationalization, seven of Sumitomo Pharma's U.S. subsidiaries were combined into one company in July of this year to improve profitability and strengthen the business foundation through efficiency and cost synergies. By reducing duplicated operations, simplifying the chain of command and order, etc., we expect to achieve an annual

rationalization effect of approximately US\$400 million by FY2024, compared to FY2022.

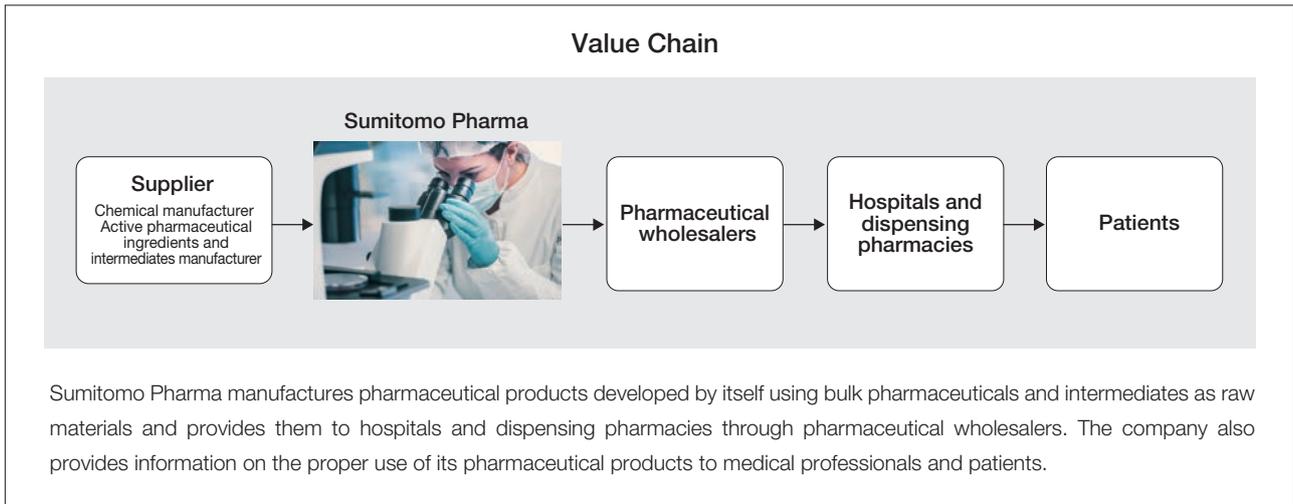
In addition, the Phase 3 trial of ulotaront, our next blockbuster drug candidate, is scheduled to be completed this year, and if approved, is expected to contribute from FY2024\*. In the future, we also plan to launch products in regenerative medicine/cell therapy and frontier businesses. We will work to build a solid earnings base over the medium- to long-term by ensuring that our diverse pipeline leads to product launches.

\*To be revised for launch target based on consultation with the FDA, etc.

#### Estimation of revenues from three key products



## Value Creation Model: Sumitomo Pharma



## System for Providing Added Value

### Sumitomo Pharma's Competitive Advantages

Although Sumitomo Pharma is smaller in scale than global major pharmaceutical manufacturers, its strength is its strong sales platform in the U.S., the region with the greatest demand for pharmaceuticals. In addition, Sumitomo Pharma is at the forefront of development of regenerative medicine/cell therapy which is expected to see market growth as cutting-edge healthcare, and is currently making progress in clinical development while also collaborating with academia and biotech companies.



### Major Processes Generating Competitive Advantages

In the business of regenerative medicine/cell therapy, Sumitomo Pharma has both the Regenerative & Cellular Medicine Kobe Center, a research facility, and the SMaRT facility, the world's first commercial manufacturing facility dedicated to regenerative medicine/cell therapy products derived from allogeneic iPS stemcells and last year, construction began on a new cell product manufacturing facility in the United States. In addition, in the U.S., we received approval in October 2021 for RETHYMIC®, a regenerative medicine product for the indication of pediatric congenital atresia, and furthermore, we are currently conducting a Phase 1/2 study (investigator-initiated clinical trial) for Parkinson's disease and a clinical trial for retinal pigment epithelium tear in Japan. In this way, based on our top-runner manufacturing capabilities and the responsiveness we have cultivated in Japan and the U.S., we will further strengthen this business by expanding it globally from Japan.



### Providing Customer Value

We aim to contribute to improving the quality of life of patients by providing new value globally that can only be achieved through regenerative medicine based on open innovation, utilizing its abundant pipeline, drug discovery capabilities, cutting-edge technology and know-how, and its broad scientific network.



## Added Value Provided to Society

### Contributing to the Advancement of Cutting-edge Healthcare and Better Quality of Life for Patients

Sumitomo Pharma contributes to the treatment of patients with various diseases by providing high-quality medicine and drug information. In addition, the company contributes to the development of advanced healthcare by utilizing the technologies and knowledge cultivated by Sumitomo Chemical over many years in the life science field. Through synergy between Sumitomo Pharma and Sumitomo Chemical, we work on contributing to solving healthcare issues, one of the material issues to be addressed as management priorities.

