

Digital Solutions Business

Focusing on measures to grow market share and initiatives in the area of upfront investments with sales and development working closely together

In the Digital Solutions Business, we saw revenue increase but profits decrease in FY2022.

In FY2023, we will focus on measures to increase our market share during the market recovery period in FY2024 and initiatives in the area of upfront investments. In addition, we will improve profitability through business structural reforms (optimization of resource allocation) and operational excellence, including cost reduction.

In terms of structure, in June 2023, we changed the reporting line of R&D in existing businesses from the CTO to business departments. We will further strengthen cooperation with the development departments, and ensure that sales and

development are on the same page in responding quickly to changes in the external environment.

In order to make our sales and production structures even more sustainable, we will utilize digital technology to strengthen supply chain management.

Mikio Yamachika
Senior Officer

Semiconductor materials

Business strengths

- Strong relationships with major global customers
- Flexible development, sales, and production structure that meets customer needs
- Product development and problem-solving capabilities developed based on polymer/organic synthetic technologies and analytic technologies
- Stable supply of high quality products

Awareness of the business environment

- Increased demand for semiconductors due to digitalization of society
- Increased needs for cutting-edge materials due to digital technology innovation
- Miniaturization of semiconductor chip, expanded demand for 5G
- Development of digital infrastructure

Edge computing/display materials

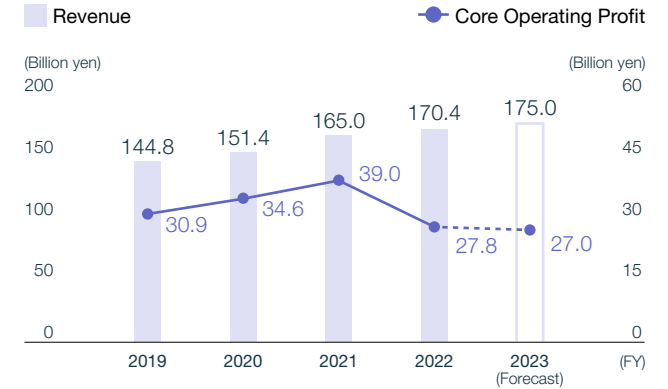
Business strengths

- Products with high market share
- Sales and production systems compatible with customer needs
- Technical prowess grounded in polymer technology

Awareness of the business environment

- Spread of high definition televisions such as 4K and 8K
- Growing LCD panel production in China driven by robust demand

Revenue and Core Operating Profit



Sale of Main Products (YoY)

Semiconductor materials	YoY ytd	Business environment (FY2023 forecast)	
		1H	2H
EUV	Up over 55%		
ArF	Up around 15%		
Multilayer materials	Up around 10%		
Other lithography materials	Up around 20%	↘	↗
CMP materials	Up over 20%		
Cleaning solutions	Up around 30%		
Packaging materials	Slight decline		

Display materials	YoY ytd	Business environment (FY2023 forecast)	
		1H	2H
Alignment Layer	Around -15%		
Passivation Coat	Less than -15%	↗	↗
Color resists	Around -65%		
OLED materials	Around -5%		

Edge computing	YoY ytd	Business environment (FY2023 forecast)	
		1H	2H
ARTON	Around -15%	→	↗

Growth strategy

Aiming to Achieve Net Sales and Profits beyond the Market's Rate of Growth and Further Expand Market Share, Primarily with Leading-Edge Photoresists

In the Semiconductor Materials Business, which is the core of the Digital Solutions Business, our aim is to grow sales faster than market growth. Specifically, in addition to further increasing our high share of the markets for ArF photoresists and multilayer materials, we are working toward a full-scale launch of EUV photoresists. Through these efforts, we are targeting revenue growth above the medium-term input

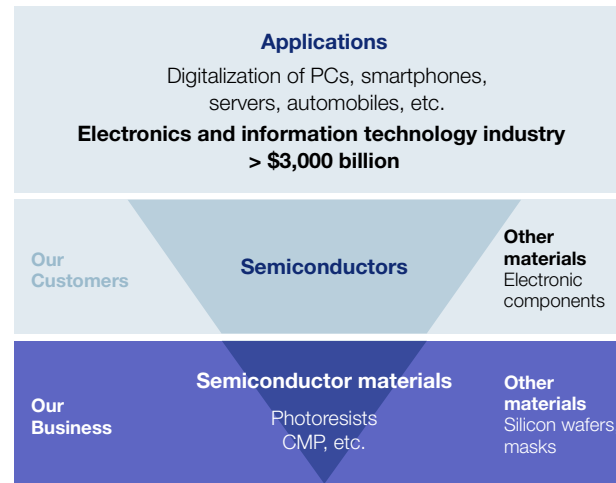
growth rate for silicon wafers, which is the core client industry for the Semiconductor Materials Business. In FY2022, we have newly developed and launched cutting-edge packaging materials for printed circuit boards in response to the full-fledged rollout of fifth generation mobile communication systems and autonomous driving. Despite some slowdown, semiconductor demand will continue to rise due to

increasing digitalization in areas related to PCs, smartphones, servers, automobiles, and more. In keeping with that, we will achieve sales growth at a faster rate than market growth and forecasts based on the business environment.

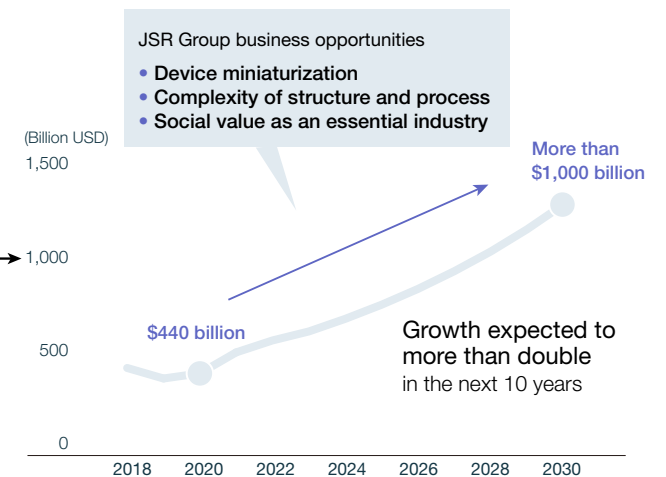
Going forward, moreover, we will continue to focus our efforts on leading-edge photoresists like ArF and EUV, which are expected to grow further given the market environment. Already, JSR boasts the global top share for ArF photoresists, with our products accounting for about a third of all semiconductors produced in the world. Instead of being satisfied with that record, our policy is to keep building up this share. In EUV photoresists, our aim is to be best-in-class by contributing more to the frontier 3 nm as well as future generation of semiconductors and to memory, primarily for the Taiwanese and Korean markets. We also expect wide growth in CMP materials, and packaging materials that support more complex processes.

	Revenue Faster than market growth	Core Operating Profit Margin Maintain Strong Margin (≥ 23%)
Market	<p>Scale</p> <ul style="list-style-type: none"> Total photoresist market: \$2 billion (Semiconductors: \$550 billion) <p>Trends</p> <ul style="list-style-type: none"> Steady growth Technological innovation advances 	
Social Value	<ul style="list-style-type: none"> Realize a smart society (AI, IoT) Achieve miniaturization and high performance requiring less power 	
Strength	<ul style="list-style-type: none"> High market share in advanced materials (e.g., ArF 30%, alignment film 50%) 	
Strategy	<ul style="list-style-type: none"> Concentration of resources on Semiconductor Materials Business Scale and fields expansion including M&A 	

JSR Group's Position



Semiconductor Market

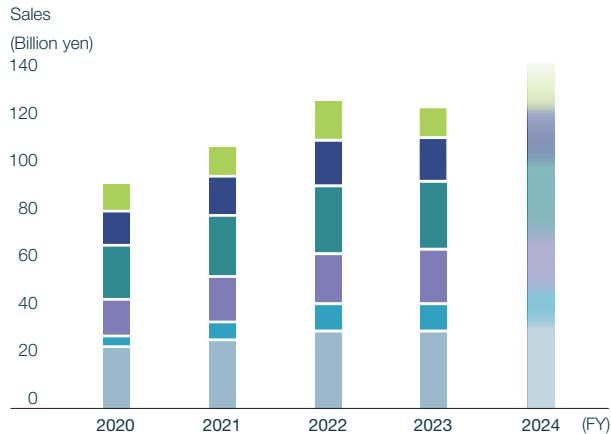


Acquired Next-Generation EUV Technology, Leading the Global Market with a Broad Product Portfolio

JSR Group has a global supply system built around R&D, manufacturing, and sales bases in Yokkaichi, the United States, and Belgium. We are working to optimize production processes and innovate technology while endeavoring to provide a steady supply of the products each customer needs. Moreover, in October 2021, we completed acquisition of Inpria, the world leader in design, development, and manufacture of metal oxide photoresists (MOR). The product is attracting attention as an EUV lithography technology for the further miniaturization of semiconductors. Currently, we are developing the MOR business through creating synergy with Inpria to bring mass production technology and quality control to the next level.

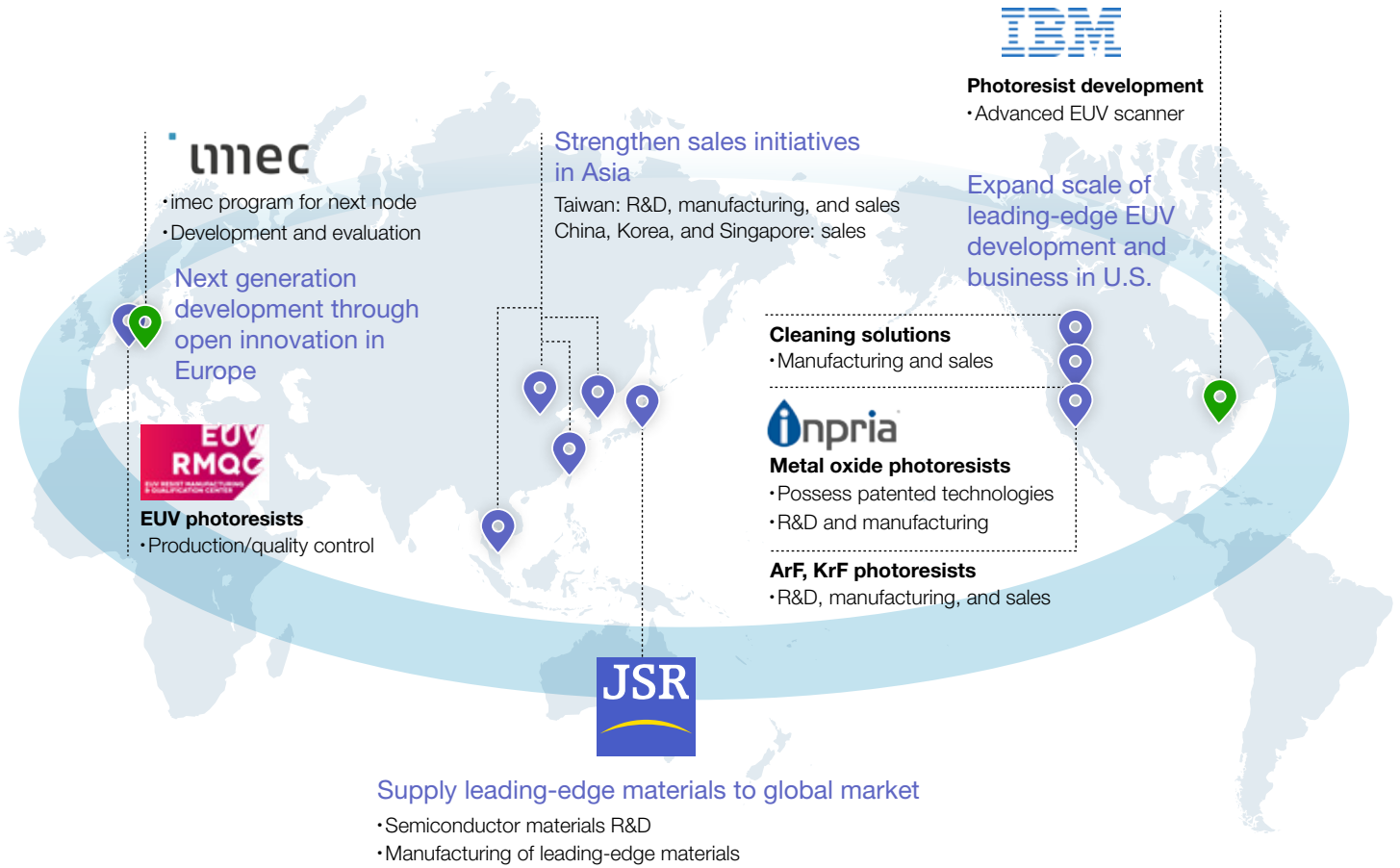
Semiconductor Materials Business Plan

- ArF ■ EUV ■ KrF and other lithography ■ Multilayer materials
- CMP/cleaning solution ■ Packaging materials, etc.



Semiconductor Materials Global Strategy

- 📍 JSR Group companies
- 📍 Joint R&D bases



Structural reforms

Optimizing the cost structure amidst the drastic change in the display market environment to focus on development and sales growth of cutting-edge materials

Optimizing the cost structure through business restructuring to expand sales and profits in the Chinese market

Since FY2020, JSR has implemented global business restructuring given the drastically changing display market environment. We closed our plant in Taiwan that was responsible for manufacturing color resist in March 2022, while scaling back production at our plant in South Korea. We shifted resources as the growing Chinese market has been positioned as the primary market as part of efforts to optimize our cost structure.

In the Chinese market, we have continued to grow our market share of highly competitive alignment layer and passivation coat and develop OLED materials in addition to responding to customers' production adjustments and addressing technical issues flexibly. This will ensure that we can build a business foundation that generates stable earnings.

Alignment layer and passivation coat are important materials that both improve panel performance such as high

definition and brightness and increase productivity in panel manufacturing such as yield and throughput. In the future, we expect to see an expansion in environmentally friendly applications such as low-temperature processes and PFAS-free, as well as AR/VR and outdoor public displays.

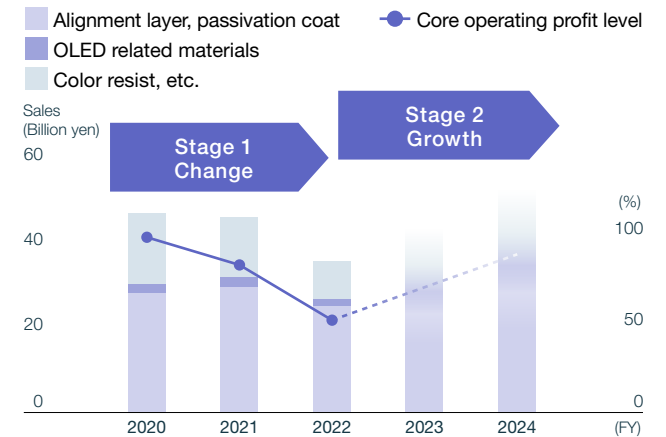
In addition to leveraging its business infrastructure in China, JSR will expand its provision of cutting-edge materials and process solutions to customers. We will achieve this by developing advanced platform technology in response to the evolution of panel technology and strengthening quality competitiveness. Also, we will maximize cash flow and establish a sustainable business structure for the LCD materials business as a moneymaker with high ROIC.

We will further reduce costs in response to the weakening market over the short term to increase revenue, while striving to steadily boost sales and revenue in the display market, which is expected to recover starting in 2023.

Focusing on development and increasing sales of cutting-edge materials utilizing our strengths

To capture the growing need for OLED materials in mobile and IT applications, we will focus on growing sales of low-temperature alignment layer materials that leverage our strengths, high refractive materials that increase light extraction efficiency, and low dielectric thin film encapsulation materials to expand our portfolio. In terms of passivation coat for LCDs, we will focus on developing the optical IPS market to expand sales.

Progress towards the business targets



* Assuming the core operating profit of FY2020 to be 100%

Business progress	Increase share in the Chinese market (alignment layer and passivation coat)
	Market penetration of new products (optic IPS/OLED)
	<ul style="list-style-type: none"> Complete business restructuring in response to change in the market structure (Stage 1) Optimize business and move towards growth phase (Stage 2)