Electronic Materials Business

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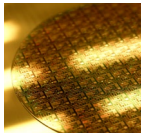
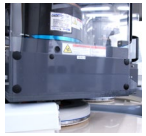
Senior Officer

As AI continues to evolve and become more deeply embedded in society, we are driving an evolution in advanced semiconductors that supports these changes by developing and introducing materials to the market. We aim for a mutually motivating relationship between societal progress and the growth of JSR's electronic materials business.

Mainstay Product Outline


Lithography Materials


Process Materials


ALD/CVD Materials


Advanced Packaging Materials

Strengths and Awareness of the Business Environment

Business strengths

- Product Supply Capabilities: Broadly supply lithography materials, cleaning solutions, and other materials
- Fully Integrated Systems: Integrate operations from development through mass production supply
- Scientific Capabilities and Spirit of Challenge: Continuously innovate based on a diverse field of knowledge
- Advanced Product Development Capabilities: Create EUV and other next-generation materials
- Growth Policy: Accelerate growth in existing and new fields

Awareness of the business environment

- Structural Growth: Demand for semiconductors is growing on the back of advancements in AI
- Growth in Market Scale: Outlook for more than 140 trillion yen in 2030
- More Sophisticated Manufacturing Demands: Higher precision control is essential with scaling
- Demand for Sustainability: Growing expectations for eco-friendly products
- Importance of Product Diversity: Need for materials development that aligns with new technologies

Review of FY2024

After surmounting the sluggish semiconductor market of the previous year, growing demand from AI led to record highs for both revenue and profits in FY2024. Although the year started slowly, existing efforts to strengthen the sales network and enhance manufacturing capacity bore fruit, enabling JSR to meet customer expectations from the supply capability and quality perspectives.

Medium- to Long-term Strategy

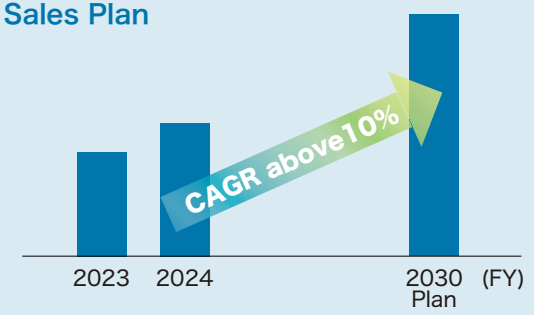
Looking to the coming five to 10 years, JSR aims to achieve sustainable growth by expanding product domains and enhancing technological competitiveness in the field of semiconductor materials. We will deploy high-performance products with a focus on lithography materials, as well as those that address CMP, cleaning, packaging, ALD, and other processing needs, and provide solutions that meet the growing process complexity and sophistication. We will also aggressively tackle such issues as next-generation packaging materials and PFAS-free chemicals*1. Supporting the continued market introduction of these cutting-edge materials is our deep understanding of the market, and our stance of tirelessly updating and taking on the challenge of a wide range of scientific fields that go beyond polymer chemistry to include theoretical and data science, as well as organic and inorganic chemistry. In addition, we will build a value chain and highly reliable supply system that integrate everything from molecular design to quality assurance, manufacturing, and stable raw material

procurement as part of cutting-edge manufacturing processes that demand precision at the angstrom level and impurity control at the ppt*2 level. We will elevate the energy of this semiconductor market to a piece of our Group-wide culture, which we will also ingrain in corporate departments and use to build a framework that supports business across the Group.

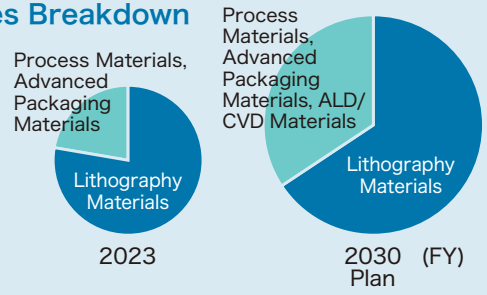
*1 Chemicals that intentionally do not contain per- and polyfluoroalkyl substances (PFASs), which do not break down easily and therefore remain in the environment long term.

*2 Refers to a concentration of 1 part per trillion (10-12), an extremely low concentration equivalent to dissolving one grain of sugar in roughly 1,000 official Olympic-sized swimming pools' worth of water.

Sales Plan



Sales Breakdown



Medium- to Long-term Strategy/Initiatives

Growth Strategy

Undertaking the Challenge of a Core Materials Company That Supports the Advancement of Semiconductor Markets

The semiconductor markets within which JSR does business have seen a rapid expansion of data traffic and ongoing structural growth against the backdrop of advancements in next-generation technologies centered on AI. The global semiconductor market surpassed 60 trillion yen in 2022 and has shown signs of exceeding 140 trillion yen in 2030.

JSR supplies a wide range of high-performance materials that are essential for cutting-edge manufacturing centered on lithography materials, but also including CMP slurries, functional cleaning solutions, and packaging materials for heterogeneous interconnects. These materials support innovations in our customers' processes while realizing sustainable business growth for JSR.

Furthermore, to meet the demands of device manufacturing as scaling and complexity accelerate, we are entering new fields such as precursors and high-performance substrate materials, and are focused on enhancing our product portfolio and strengthening our technological competitiveness. Semiconductor manufacturing demands extreme levels of control, including a dimensional precision on the angstrom level and impurity control on the ppt level. Meeting these demands requires quality assurance right from the molecular design stage, production executed under strict and optimized manufacturing conditions, and the selection of Supply chain for raw materials. JSR has therefore built a value chain that integrates everything from research and development to manufacturing, quality assurance, sales, procurement, and logistics.

Supporting the continued market introduction of these advanced materials is our deep understanding of the market, and our stance of tirelessly updating and taking on the challenge of a wide range of scientific fields that go beyond polymer technologies to include theoretical science and molecular design.

Through the development of EUV resists, photo-imageable dielectric materials, PFAS-free materials that anticipate environmental action, and other advanced products, we meet both the expectations of our customers and the demands of society.

Looking five to 10 years in the future, JSR aims for annual growth that exceeds 10% on average based on the dual approach of growing our global share for the core products of lithography materials, CMP slurries, functional cleaning solutions, and packaging materials, and developing businesses in the new fields of precursors and high-performance substrate materials.

By converting the dynamism of the semiconductor market into energy for the entire Group, the business, technology, and corporate departments will work in unison to build a framework for supporting growth.

In addition, we are fully committed to solving sustainability issues involving enhanced energy efficiency and lower environmental impact, and will therefore create PFAS-free products, high-performance materials that support the coexistence of AI and humans, and other forms of value that contribute to the solutions for the challenges faced by society. On the foundation of science-based value creation, JSR will assist advancements in the semiconductor industry and the realization of a sustainable society.