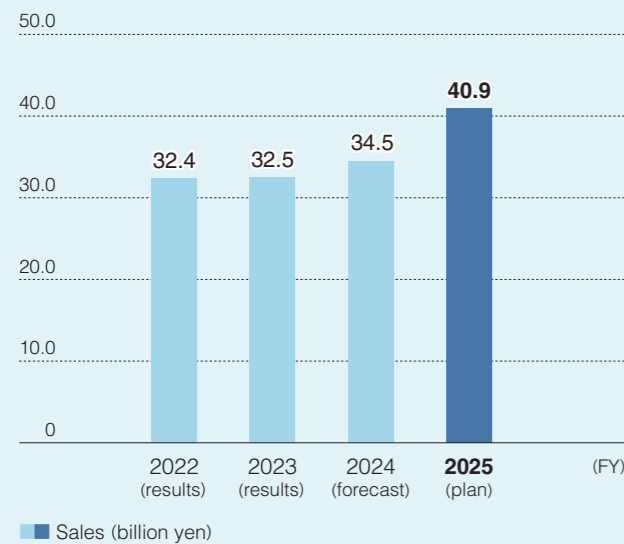


Overview of High Value-added Products

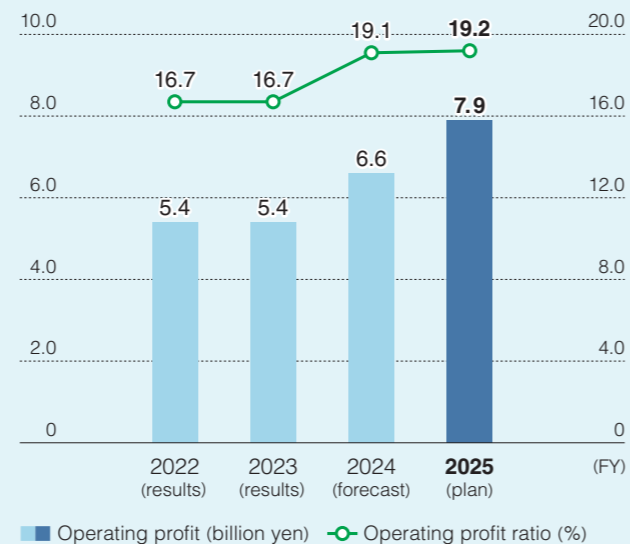
Positioning chemicals for special fibers, chemicals for special electronic parts, lubricant additives, permanent antistatic agents, and medical and pharmaceutical products, which contribute to carbon neutrality and improved QOL, as high value-added products, we plan to conduct capital investment of 9 billion yen from FY2021 to FY2025, including the MTP 2025 period. We expect an incremental operating profit of 2.5 billion yen from this capital investment, and aim to achieve an operating profit of 7.9 billion yen in FY2025.

However, faced with a tough situation due to sluggish markets for electronic parts and semiconductors and intensified price competition in the Japanese and Asian markets caused by weakened domestic demand in China and an oversupply of Chinese products, we forecast an operating profit of 6.6 billion yen for FY2024.

▶ Sales of high value-added products (targets and results)



▶ Operating profit / operating profit ratio for high value-added products (targets and results)



(Note) Fixed costs included in high value-added products are calculated based on FY2022.

▶ Capital investment in high value-added products (plan)

Classification	Product group	2021	2022	2023	2024	2025 (FY)
CN	Chemicals for special fibers				Installation in Kashima (2024/0.7)	
CN	Chemicals for special electronic parts			Expansion in Nagoya (2023/0.4, 2025/0.5)		
CN	Lubricant additives	Expansion in China (2021/0.3), Installation in Korea (2021/2.4)	Planned expansion in Kashima and Kyoto (2025/0.8)			
QOL	Permanent antistatic agents		Installation in Thailand (2022/3.4)			
QOL	Medical and pharmaceutical products				Expansion in Nagoya (2024/0.1), Expansion in Kyoto (2024/0.3)	

FY2021 to 2025 Total investment **9.0 billion yen**

Incremental operating profit during the MTP 2025 period **2.5 billion yen**

(Note) (Start year / Investment amount [billion yen])

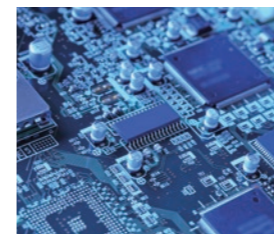
Contribution to CN (carbon neutrality)



Chemicals for special fibers

Composite materials using carbon fibers are used in a wide range of applications, such as wind power generation, automobiles, aircraft, and pressure vessels. Sales of carbon fibers for windmill blades were sluggish in FY2023, which affected our net sales.

However, as carbon neutral efforts have recently progressed around the world, demand for windmill blades has been growing rapidly due to the spread of renewable energy. Expecting demand for carbon fibers to increase in the medium to long term, we plan to increase our production capacity by about 50% by FY2025.



Chemicals for special electronic parts

Electrolytes for aluminum electrolytic capacitors used in electronic circuits are industry-standard, long-run products. With high electrical conductivity over a broad temperature range and excellent long-term stability at high temperatures, they are used in capacitors that require high reliability, such as control units for driving assistance system circuits in electric vehicles (EVs) and other vehicles.

In FY2023, sales were sluggish due to weakened demand for general consumer goods. However, since demand is expected to expand in the medium to long term, we plan to increase our production capacity by about 30%, with further increases planned for the future.



Lubricant additives

As polymethacrylate (PMA)-based additives, our lubricant additives help improve fuel efficiency. With the largest share of the PMA-based additive market in Japan and the second largest overseas, these products are used in engine oils for gasoline vehicles, hybrid vehicles (HVs), and plug-in hybrid vehicles (PHVs). We are also working on developing lubricant additives optimized for EVs.

To meet growing demand due to global trends of reducing CO₂ emissions, we are considering increasing the production capacities of our production sites in Japan and South Korea.

Contribution to QOL



Permanent antistatic agents

Permanent antistatic agents are used in a wide range of applications to prevent various problems caused by static electricity (destruction of electronic circuits, malfunction of electrical appliances, adhesion of dust, etc.) and accidents (fires, explosions, etc.). With the advent of an ultra-advanced information society, demand is increasing for applications such as semiconductor carrier trays and packaging for electronic devices and precision parts. However, sales fell in FY2023 due to continued inventory adjustments in the semiconductor industry.

We began production at the Rayong factory of our Thai subsidiary in 2022, aiming to strengthen our competitiveness and develop new applications.



Medical and pharmaceutical products

Polyethylene glycol for pharmaceuticals is used as a pharmaceutical additive in a base material for ointment, a suppository base material, and tablet coating agents. It is also used as the active pharmaceutical ingredient for cleaning agents for the digestive tract. Other applications include tissue regeneration and cell culture. We increase production capacity at the Nagoya Factory by about 20% in May 2024, with further increases planned for the future.

Non-absorbable topical hemostatic materials for the central circulatory system are surgical hemostatic materials made of polyurethane. They are used in many vascular surgeries in Japan as hemostatic materials for the anastomosis of all blood vessels, excluding cerebral vessels. Having obtained CE marking, we have entered the European, Hong Kong, and Taiwanese markets. To meet future demand growth, we are working to enhance our facilities and production efficiency (scheduled to start operation in December 2024). We will ensure stable quality and supply capacity to further expand overseas.