Mitsui Chemicals

Dec. 18, 2024

# Business Strategy Presentation

- Life & Healthcare Solutions
- Basic & Green Materials

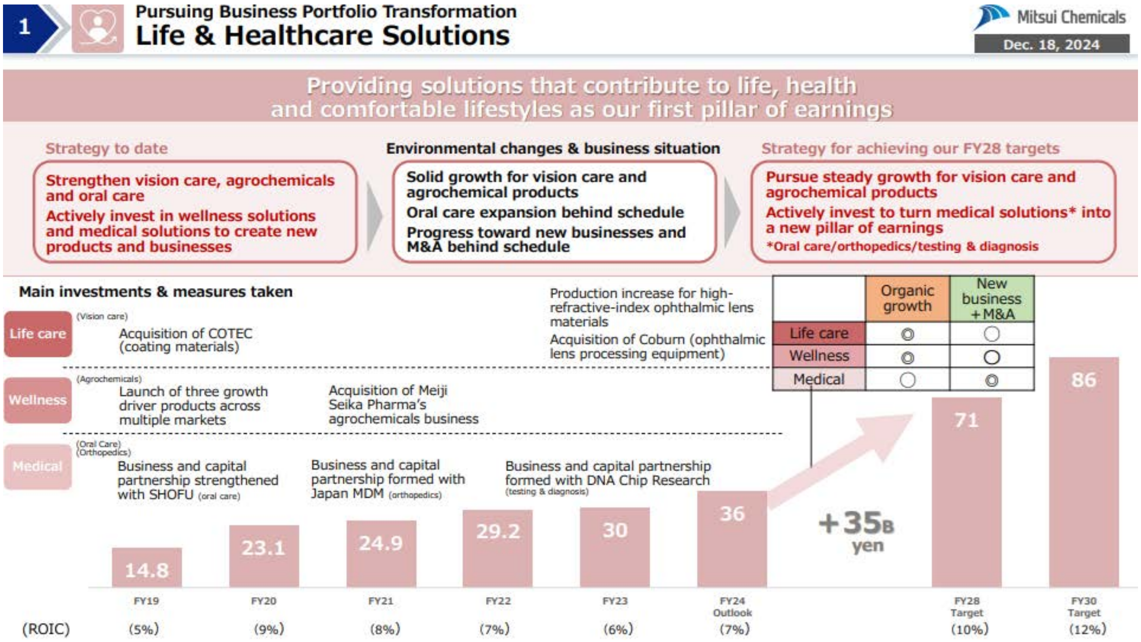
0→1 MAKE IT HAPPEN

Mitsui Chemicals Group

# Business Strategy Presentation
# Life & Healthcare Solutions

**TANAKA Hisayoshi**
田中 久義
Managing Executive Officer,
Business Sector President, Life & Healthcare Solutions Business Sector

Dec. 18, 2024



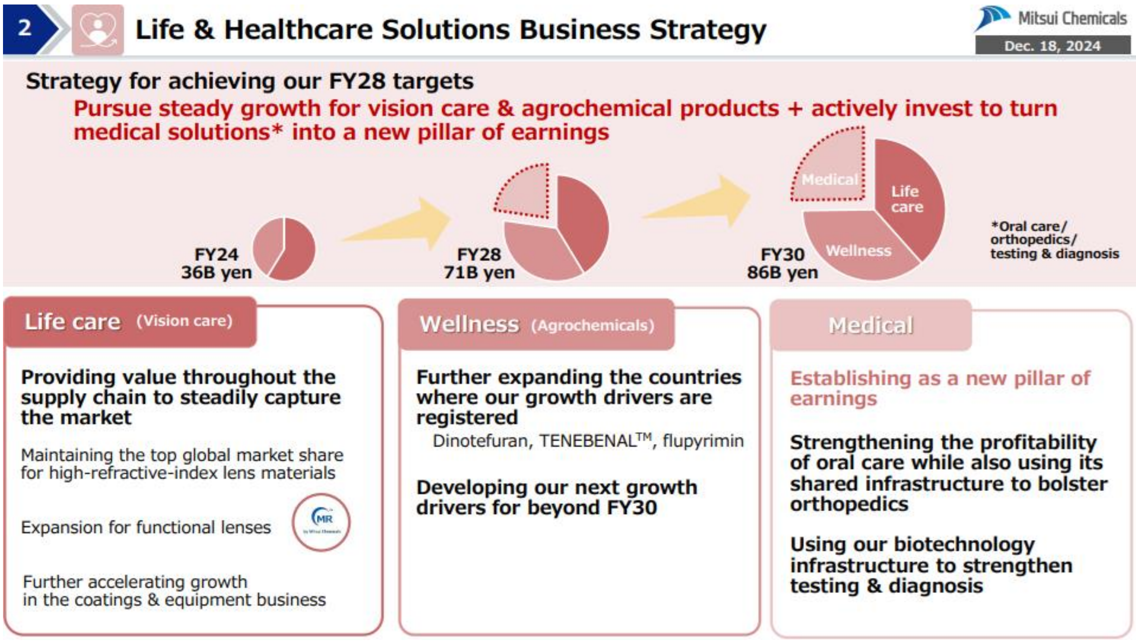

There will be no change to the basic strategy of Life & Healthcare Solutions. As we have explained so far, we will aim to strengthen and develop the Life care segment, which is centered on vision care, and the Wellness segment, which is centered on agrochemical products, mainly through organic growth. In addition, we plan to expand the Medical segment, which is expanding its oral care business, mainly through M&A, with an eye toward entering new businesses.

On the other hand, we have made some changes to our numerical targets.

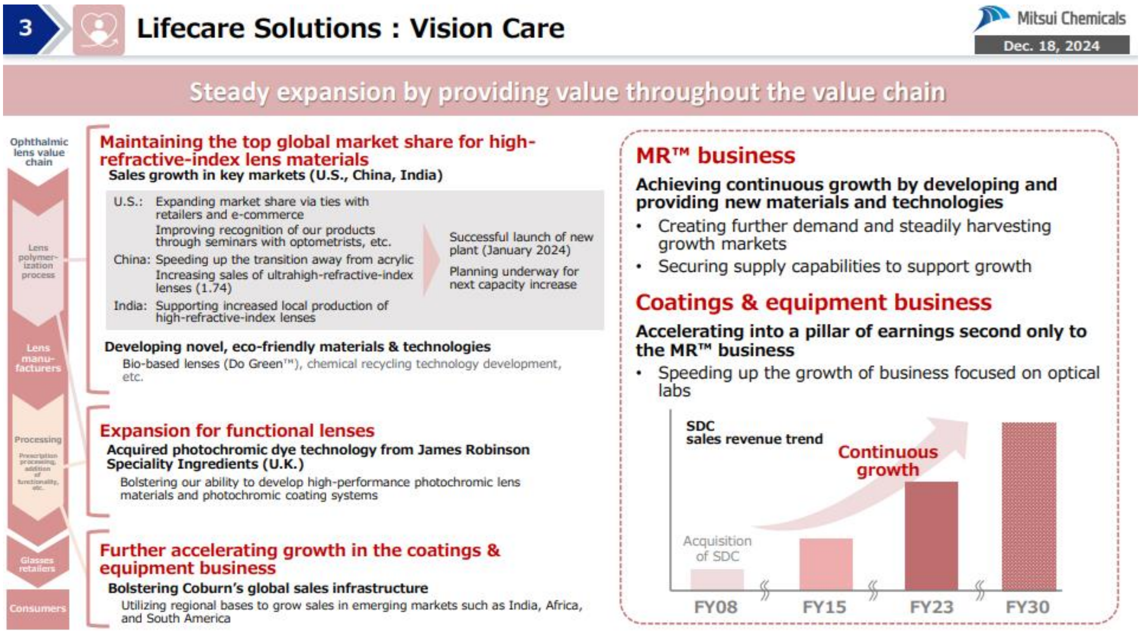
Our initial plan had set fairly ambitious targets of operating income before special items of 90 billion yen in fiscal 2030 and 65 billion yen in fiscal 2025 as an interim target. However, we have revised our figures and now aim to achieve 86 billion yen in fiscal 2030, with the interim target of 65 billion yen in fiscal 2028, three years later than initially planned.

Operating income before special items for fiscal 2024 is expected to be 36 billion yen, and we have achieved an average annual growth rate of nearly 20% since fiscal 2019.

After carefully examining the changes in the environment both within and outside our Group to date, we have revised our estimate to more probable figures.




Due to research and development costs for launching new businesses such as oral care, the medical business's contribution to profits is currently limited. However, collaborations are progressing in areas other than oral care, such as orthopedics and testing and diagnosis, and we aim to expand this to account for approximately one-quarter of total profits by fiscal 2030.



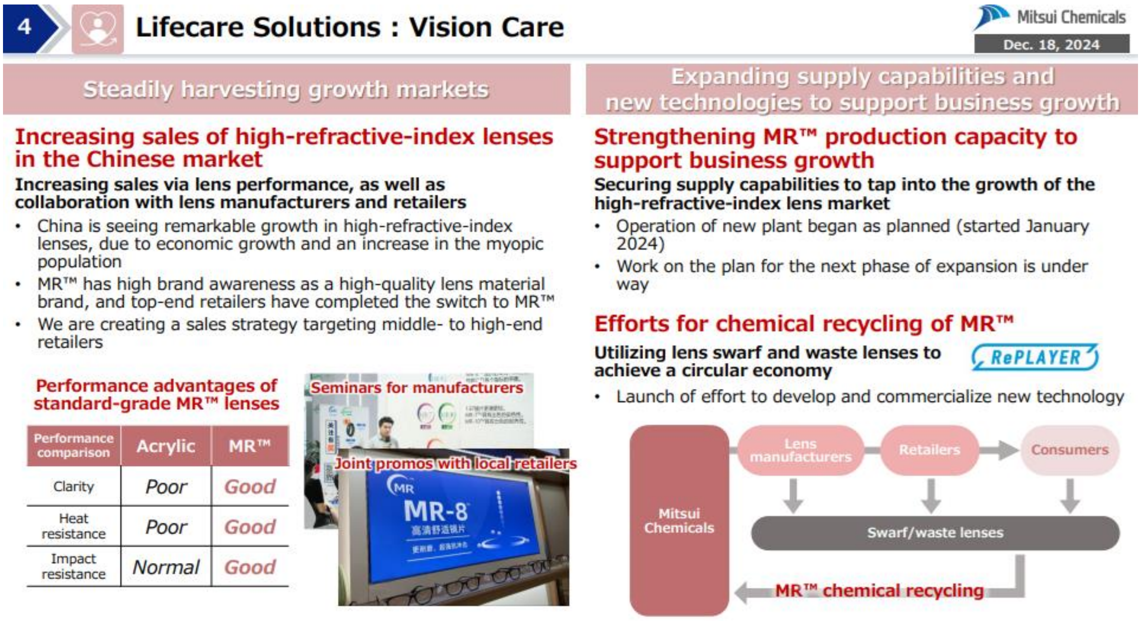

As shown on the right side of the document, there are two directions for growth in vision care.

Our main product, high refractive index material MR™, will capture growing demand by providing various solutions, including new materials and technologies.

At the same time, we will develop and strengthen our coatings and equipment business as our second pillar of earnings after MR™.

As a result of expanding our business area through multiple M&As, primarily with our US-based subsidiary SDC, its operating income before special items has grown about five times since we acquired the company in fiscal 2008.

To ensure future growth, we will continue to invest resources and expand profits.




The growth rate of the ophthalmic lens market is expected to remain at around 3% worldwide, but we believe that the growth rate of the high refractive index field will continue to be around 6% due to replacement demand, etc.

We have recently begun expanding sales of high refractive index lens materials in China, and are focusing on promotional activities to enhance the MR™ brand power in collaboration with high-end retailers.

Acrylic has a high share in the Chinese market, so we are aiming to replace it with MR™. We are working to expand sales by holding seminars to lecture on the optical properties of each material and promoting them.

Currently, we are focusing our marketing on high-end retailers, but in the future we hope to expand our target audience and accelerate sales expansion even further.

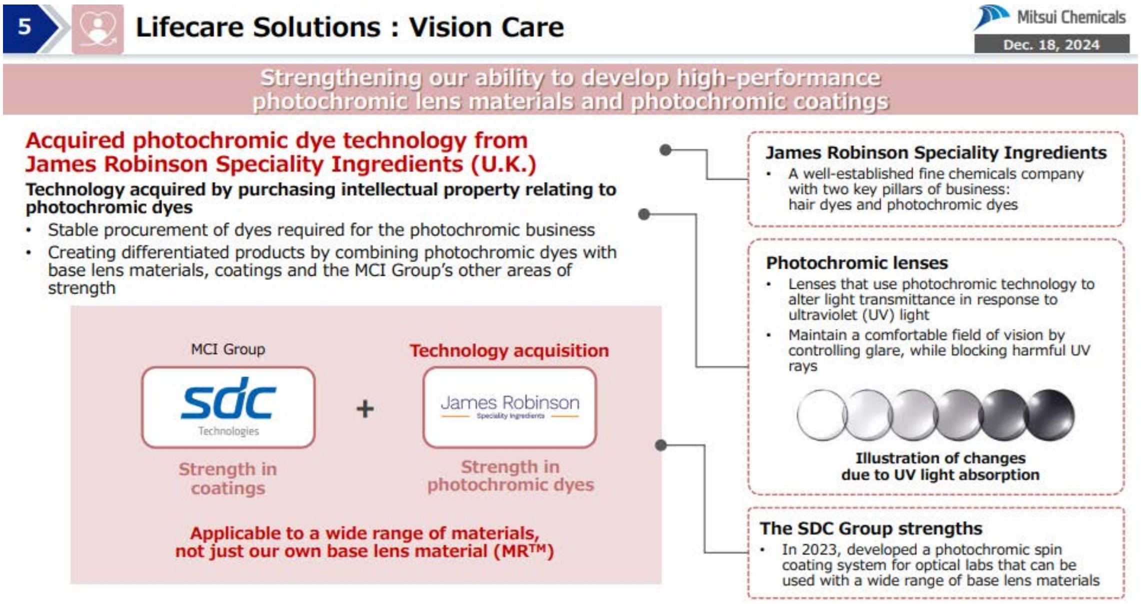
We are also working to establish a supply system that can meet the expanding demand, and launched a new plant in January of this year, which is now operating smoothly.

We are also moving forward with our next expansion plan.

We are also taking on the challenge of chemical recycling of MR™, and are considering building a new business model in which we will collect the large amounts of lens swarf generated during lens manufacturing and manufacture and sell recycled products.

We have received positive feedback about the concept from major European customers and several joint projects are already underway.

We plan to continue implementing this technology and use it to create new value.



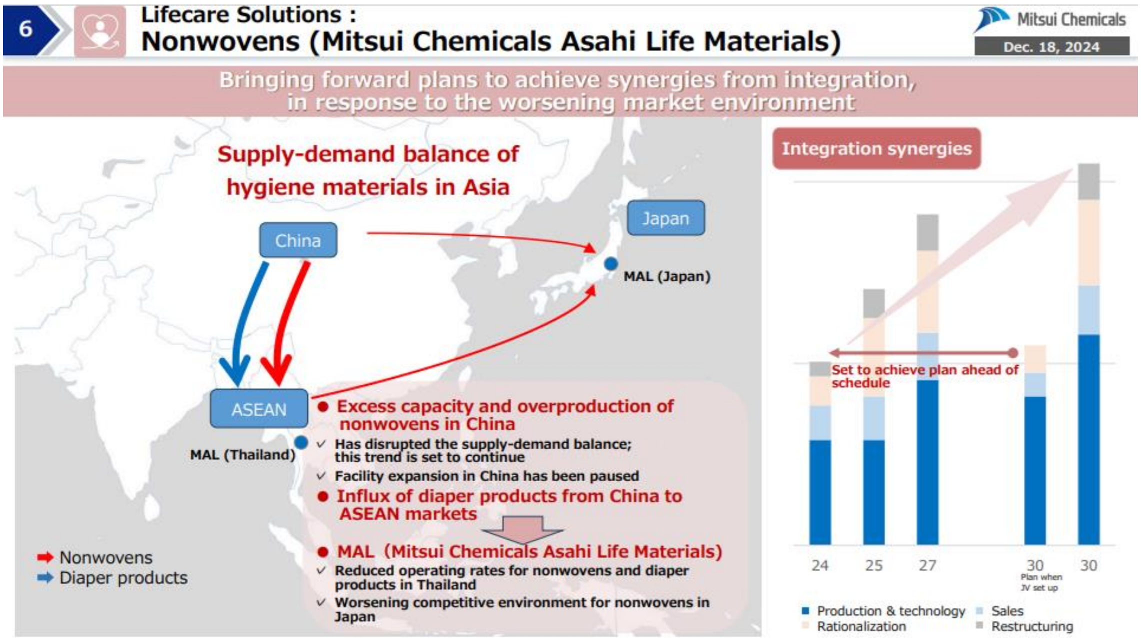

SDC has expanded through repeated M&As in the past, and in fiscal 2022 it acquired Coburn, a coating equipment manufacturer.

In addition, it acquired photochromic dye technology from James Robinson Specialty Ingredients this fiscal year with the aim of entering the photochromic lens market.

To capture the photochromic lens market, which is expected to see stable growth and is a high-value-added area, we will integrate our coating material technology, equipment technology, and dye technology and accelerate the development of differentiated products.

In anticipation of this, in fiscal 2023, SDC developed and started selling a photochromic spin-coating system for laboratories through collaboration with Coburn.

The coating materials can be used not only for MR™ but also for a variety of other products, so we would like to accelerate the expansion of applications such as for polycarbonate in the United States and applications beyond ophthalmic lens including in-vehicle applications.

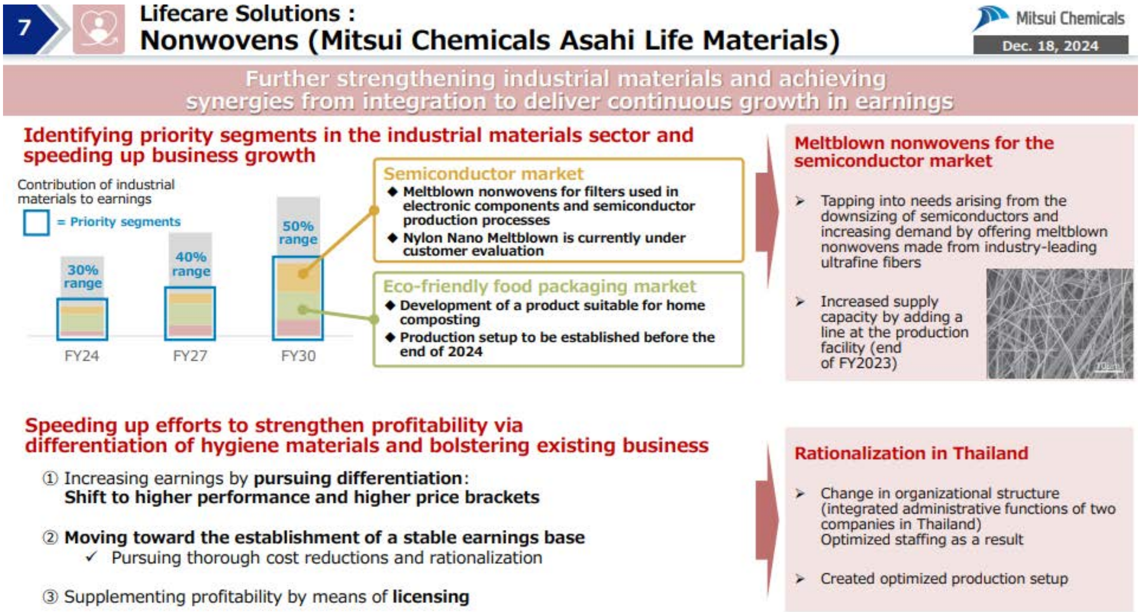



In October 2023, we merged our business with Asahi Kasei Corporation and established a joint venture Mitsui Chemicals Asahi Life Materials, but the business environment has become more severe than initially expected.

In China, demand for disposable diapers and masks increased significantly during the COVID-19 pandemic, and large-scale expansion was carried out rapidly in response. However, there is now overproduction, and cheap nonwovens and disposable diapers are flowing from China to Japan and ASEAN countries, causing difficulties for both nonwoven fabric manufacturers and disposable diaper manufacturers.

In this environment, we are working to realize the integration synergies with Asahi Kasei ahead of schedule, and we expect to achieve approximately double the synergies initially anticipated by fiscal 2030.

In particular, we would like to realize the effects as early as possible, mainly in the areas of production technology and rationalization, in order to strengthen our foundations.




Our nonwovens strategy is to shift our portfolio from a business model centered on hygiene products to industrial materials, which are high-value-added areas.

Currently, sales for industrial materials account for around 30% of total sales, but we would like to expand this to more than half by fiscal 2030.

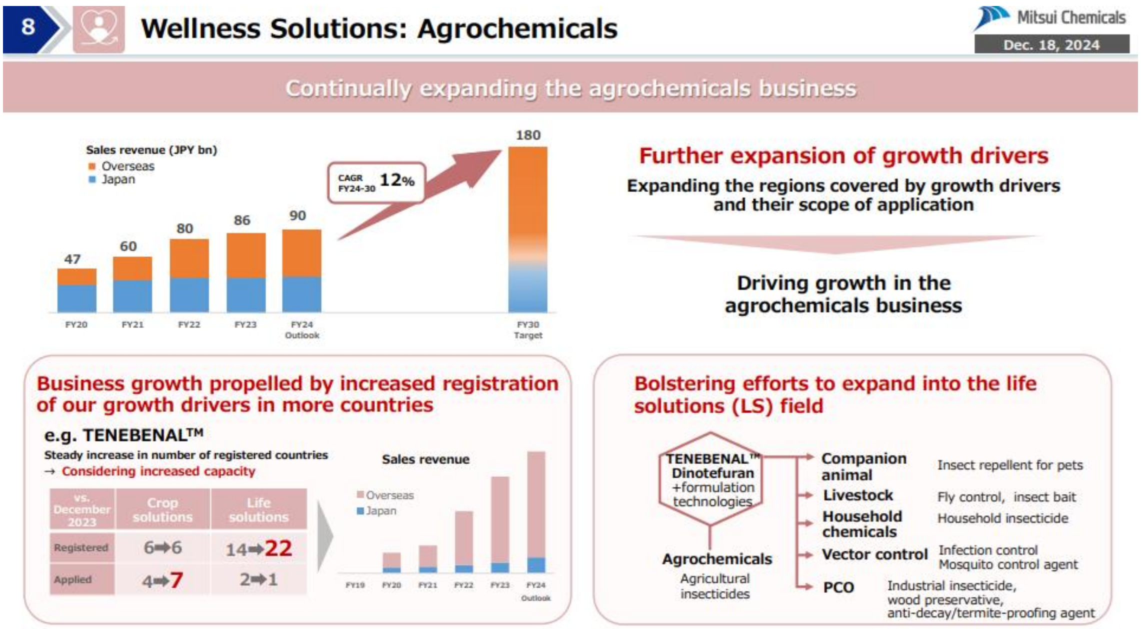
To this end, we are focusing on key segments such as meltblown nonwovens for filters used in semiconductor production processes and environmentally friendly materials.

Additionally, in hygiene materials, we are expanding sales of differentiated, high-value-added products such as stretchable nonwoven fabrics, and although the business environment has not improved, profits are improving.

In fiscal 2024, we also carried out structural reforms, integrating the administrative functions of our two companies in Thailand and optimizing our workforce.

We will continue to monitor the business environment and work to further optimize our production system.

We are also pursuing monetization through licensing, and outside of our main areas of activity, Japan and ASEAN, monetization through licensing has been leading to profits since last fiscal year.




Agrochemical products are expanding steadily, particularly driven by growth drivers dinotefuran, TENEBENAL™ and flupyrimin.

The global market for agrochemicals is said to be growing at a rate of 2-3%, but we are aiming for an even higher growth rate of 12%, and are working to expand our sales area by increasing the number of countries in which our products are registered.

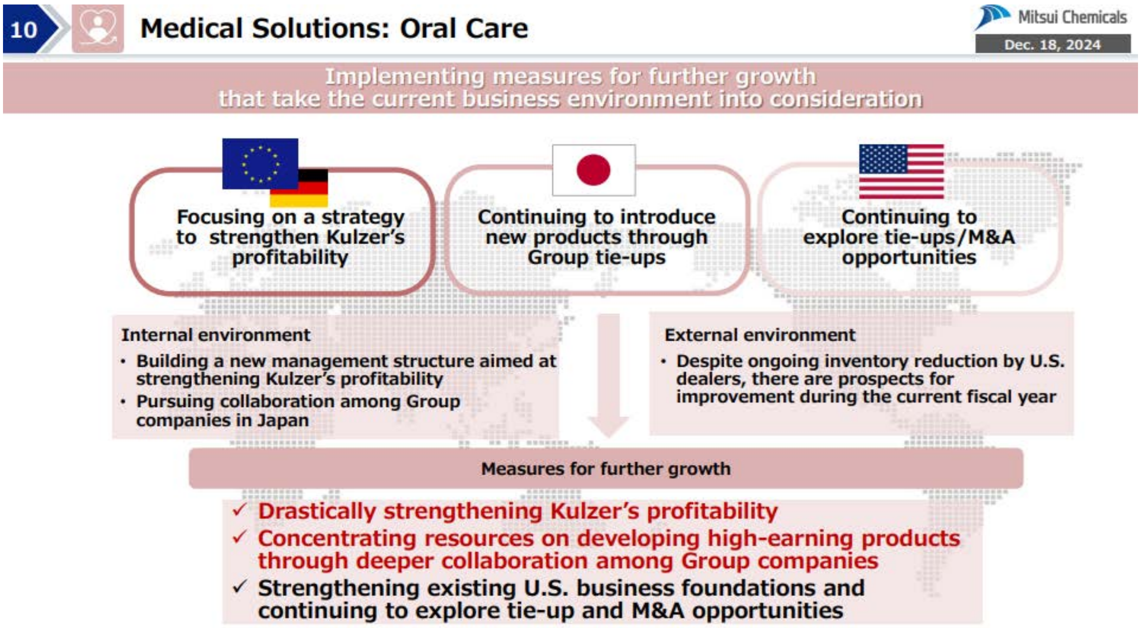
In addition, our Group's active ingredients can be used in life solutions field other than agrochemicals, such as insect repellent for pets and livestock, so we are strengthening our global expansion and expanding our profit scale.

Through these combined effects, we hope to achieve a CAGR of 12%.


In the future, we would like to focus our development of agrochemical products on the areas of low environmental impact of chemical crop protection products and biological crop protection products derived from natural products.

In naturally derived drug discovery, we are accelerating research and development in collaboration with Tohoku University.

In agrochemical products, we would like to proceed with M&A related to both chemical and biological crop protection products. We are currently compiling a list of potential acquisitions and will move forward with the implementation of these plans.




There have been no major changes in oral care since the business strategy presentation in June of this year.

We will continue to expand our regional strategy, focusing on Europe, the United States and Japan.

Although the business environment has improved slightly, dealer inventories in the United States have not yet been reduced sufficiently.

Furthermore, high interest rates have led to a slump in investment at dental clinics, and expensive medical treatments have been put on hold.

However, since there are patients, it is not a situation when demand is falling significantly, even if it is slightly stagnant, and we believe that recovery will begin in earnest after fiscal 2025.

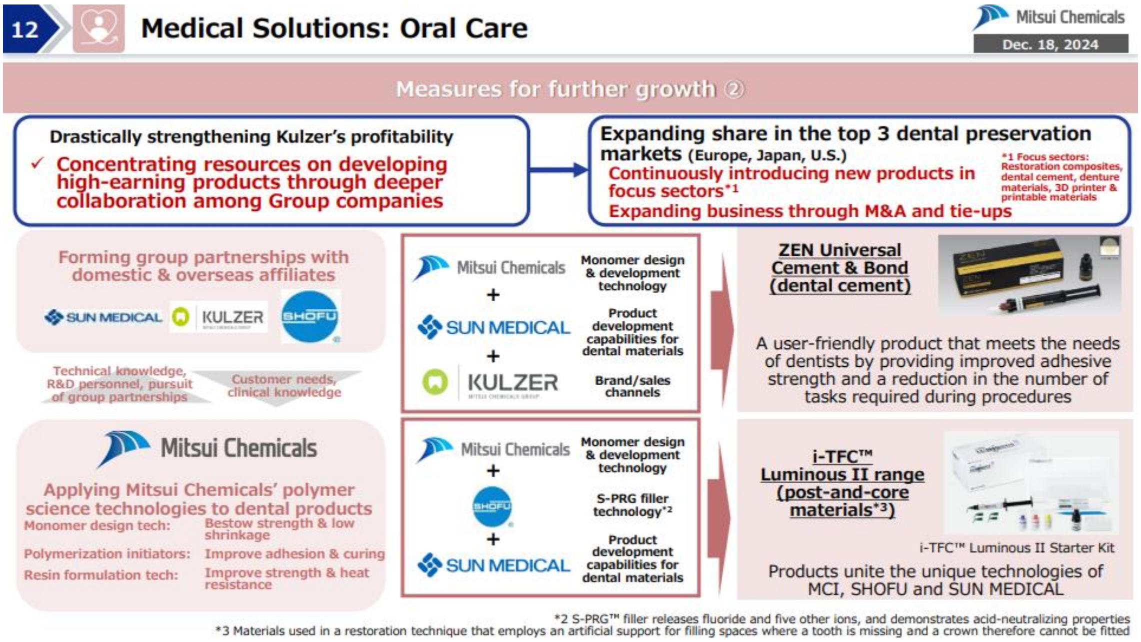
In this environment, we will endeavor to drastically strengthen Kulzer's profitability and concentrate our resources on developing highly profitable products by deepening collaboration within the Group.


Kulzer's profits are improving compared to fiscal 2023.

Although the business environment remains tough, price increases and new product launches are having an effect.

In addition, with the change of CEO and other management reforms in July 2024, we will proceed with fundamental structural reforms under the new structure and aim to double ROS by fiscal 2026.

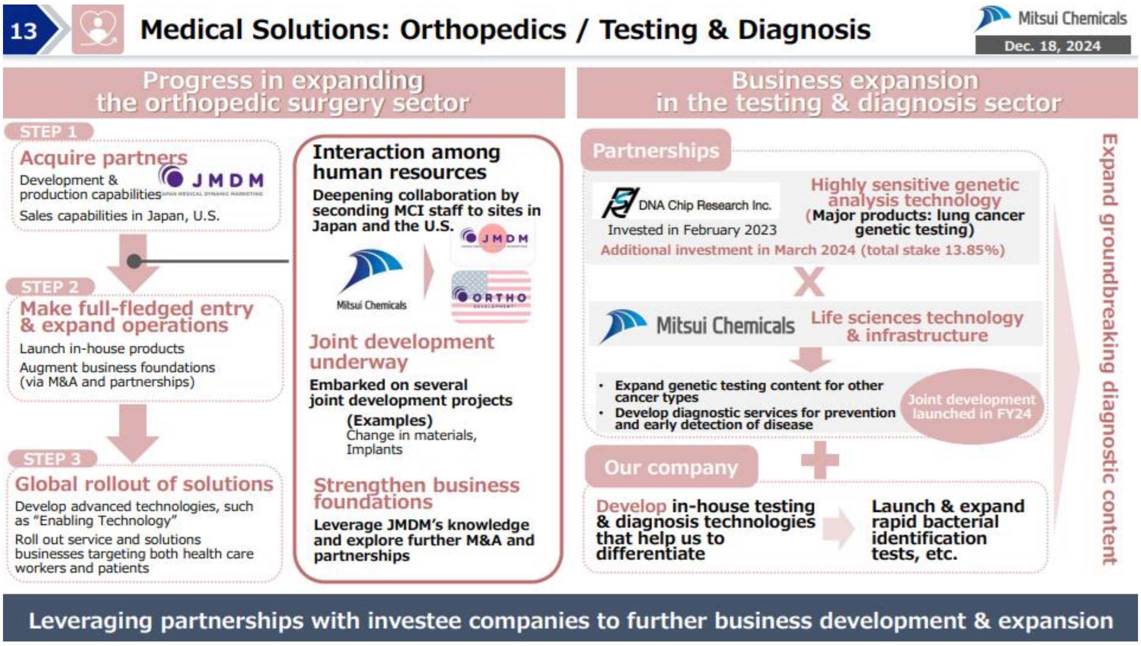
Furthermore, development is also progressing, and we are strengthening marketing by positioning composite resin for dental restoration, which is on the market not only in Europe, but also in the United States, as a door opener to develop new customers.




In 2020, our Group strengthened its capital alliance with SHOFU.

Since then, the three companies, including subsidiary SUN MEDICAL, have been working to realize synergies through joint development, production efficiency, sales, etc., and the benefits are beginning to be seen, especially with the launch of new products.

The i-TFC™ Luminous II series is a product that incorporates SHOFU's core filler technology, and is contributing to increased sales.




Our group is currently taking various steps to enter the fields of orthopedics and testing/diagnosis. In the orthopedic field, we invested 30% in Japan Medical Dynamic Marketing, Inc. in fiscal 2021 and dispatched management personnel to promote joint development and other collaborations. The company specializes in artificial joints, and while absorbing their knowledge, we are also developing our own unique products.

We hope that these efforts will lead to a strengthening of our business foundation.

In the testing and diagnosis field, we have invested a cumulative 13.85% in DNA Chip Research Institute Inc. through a capital and business alliance in February 2023 and March 2024 and are promoting collaboration in areas such as dispatching personnel and joint development.

We develop new diagnostic content in combination with our biotechnologies such as genetic engineering technology.

In addition, DNA Chip Research Institute has strengths in genetic analysis technology and is currently engaged in lung cancer-related diagnosis business. By utilizing this technology as well as our Group's technologies, we are working to expand our business including developing diagnostics for cancers other than lung cancer.

In addition, we are currently developing several testing and diagnosis technologies that will enable us to differentiate ourselves from competitors, including a rapid bacterial identification tests that we are already preparing to launch on the market. DNA Chip Research Institute's genetic analysis technology can be used for some of these themes and we are working to commercialize them through our partnership with the company.

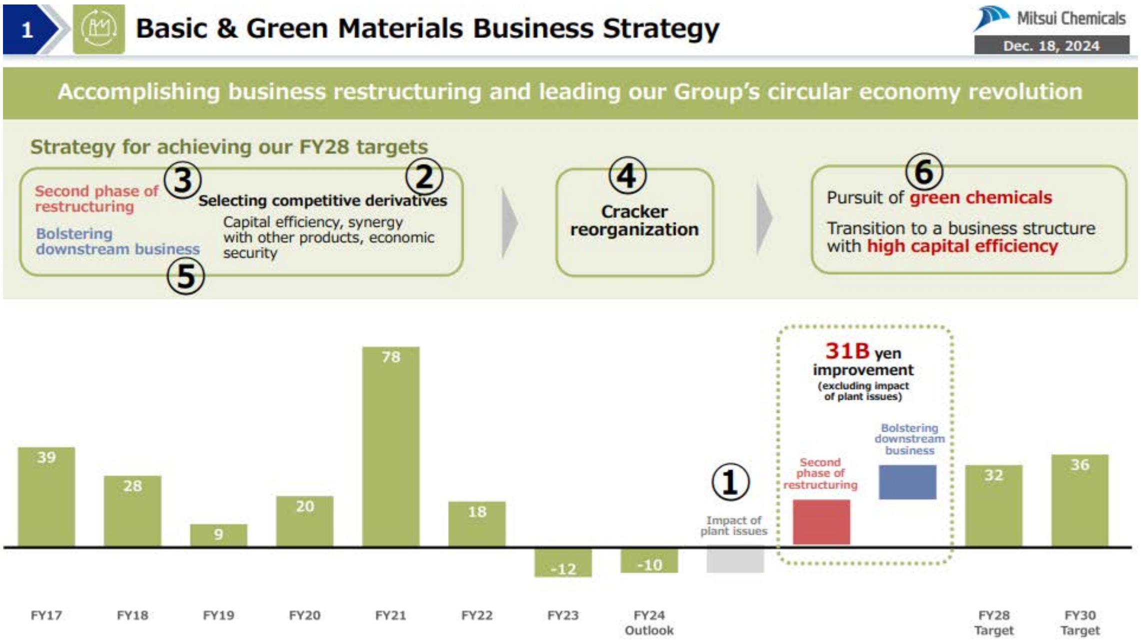
0→1 MAKE IT HAPPEN

Mitsui Chemicals Group

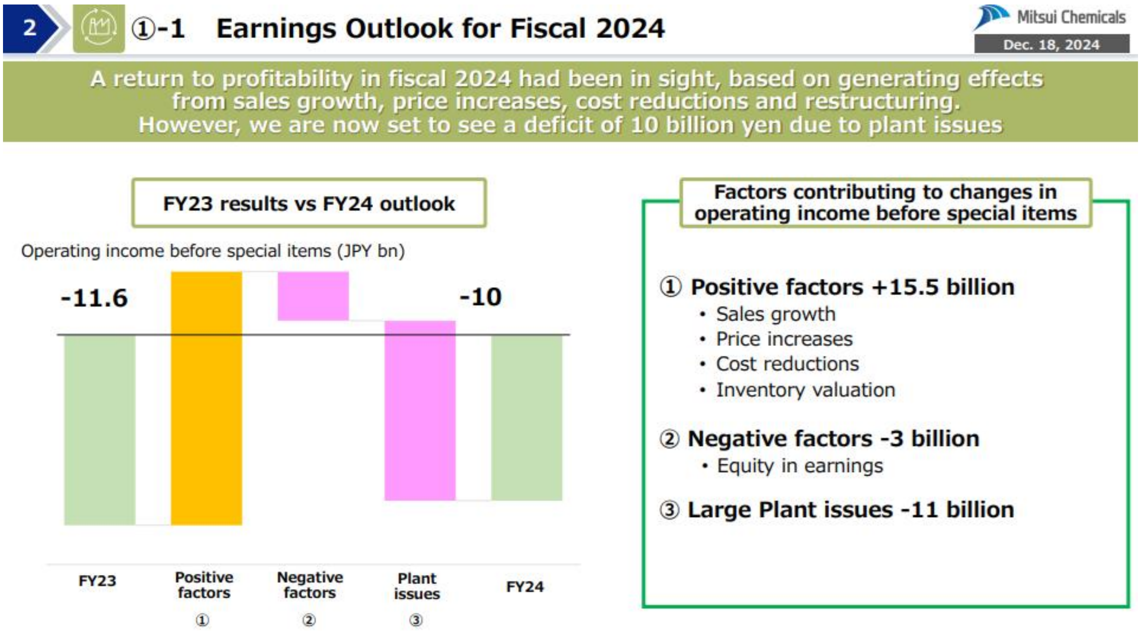
# Business Strategy Presentation
# Basic & Green Materials

**IZAWA Kazumasa**
伊澤　一雅
Senior Managing Executive Officer
Business Sector President, Basic & Green Materials Business Sector

Dec. 18, 2024



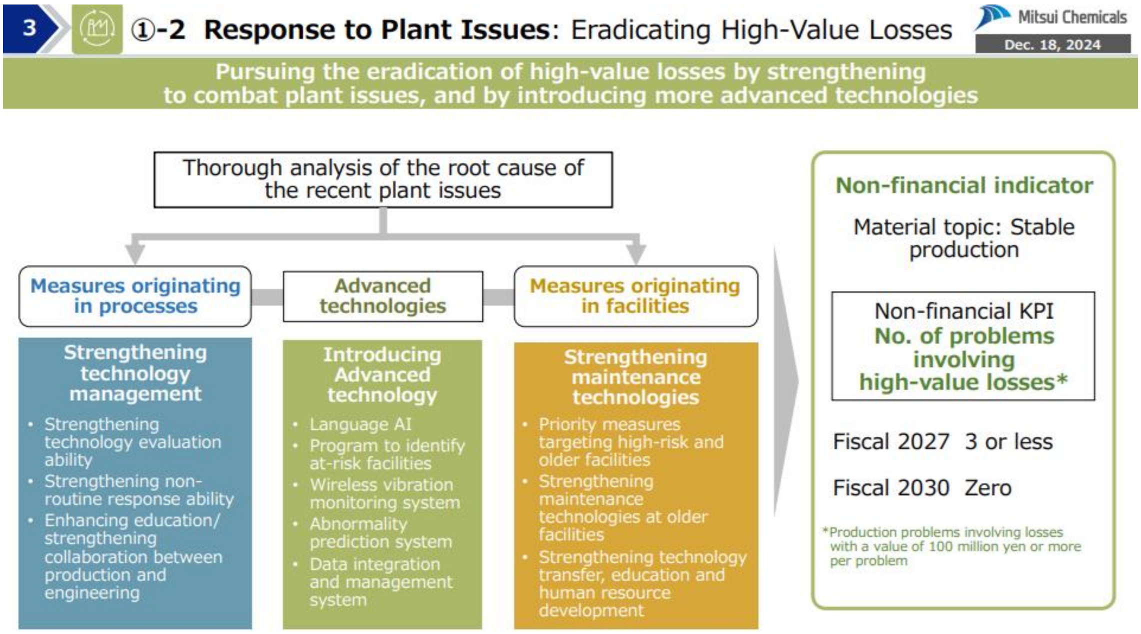

As explained at the CEO presentation on November 26th, we plan to recover from our plant issues, enter the second phase of our restructuring, and bolster downstream business, starting from our forecast for fiscal 2024, with the aim of achieving operating income before special items of 32 billion yen in fiscal 2028 and 36 billion yen in fiscal 2030.




Operating income before special items for fiscal 2024 is expected to improve by approximately 15.5 billion yen from a deficit of 11.6 billion yen in fiscal 2023 as a result of our efforts to expand sales, increase prices, reduce costs, and improve our business structure.

This improvement is due in particular to the effect of price increases.

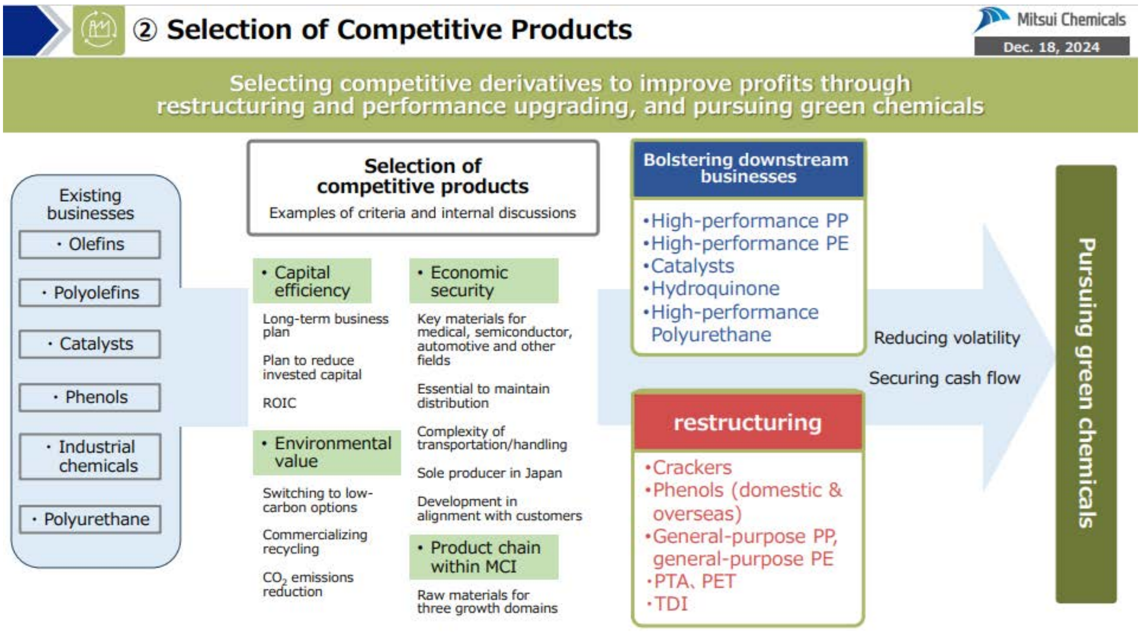
However, due to factors such as equity in earnings and other factors that decrease profits compared to fiscal 2023, as well as the impact of large plant issues, operating income before special items for fiscal 2024 is expected to be around minus 10 billion yen.




In response to the material topic of stable production, our Group has set a non-financial KPI of reducing the number of problems involving high-value losses (plant issues resulting in losses of 100 million yen or more per incident) to zero by fiscal 2030, and is working on this goal across the entire Group.

We thoroughly analyze the causes of various plant issues, including the recent issues at our Osaka Works, and classify them into those caused by processes and facilities. For each of these, we consider and implement various measures, such as strengthening our technology management and maintenance technologies, and also incorporate advanced technologies such as AI to make improvements.

We also recognize that plant issues are not just issues for the manufacturing department, and are therefore examining the issues from various perspectives, including the business and engineering departments, and taking integrated measures across the entire Group, including systems and organizations.




Influenced by the large-scale expansion in China from fiscal 2022, we are in discussions from the perspective of whether they can survive for all products as a premise of VISION 2030.

Discussions are held from the perspective of capital efficiency, environmental value, economic security, and synergies between products within our Group. For example, from the perspective of economic security, discussions are held based on criteria such as key materials for medical, semiconductor, and automobile products, products that are essential for maintaining logistics, products that are difficult to transport and handle and cannot be imported, products that are the only ones produced in Japan, and development that is tailored to the needs of customers.

We plan to continue this type of screening, continue investing in strong products and bolster downstream businesses, and restructure products that compete with imports.

While some products will continue to grow organically as essential products, we will simultaneously proceed with bolstering downstream businesses and restructuring to reduce volatility and ensure cash flows, and pursue green chemicals.

5 ③-1 Promoting the Second Phase of Restructuring

Mitsui Chemicals

Dec. 18, 2024

| | FY13～17 | FY18～22 | FY23～ | Ideal state |
|---|---|---|---|---|
| | Securing stable earnings via restructuring | Reducing volatility | Improving capital efficiency | |
| PH | AC-based IPA production starts | Honshu Chemical Industry takeover bid | 2023: AC-based IPA capacity boost<br>Mulling efforts to bolster production of HQ | Highly capital-efficient PH chain |
| | Chiba BPA/PH plant closed | MPS share transfer | Study into making overseas operations more asset-light ★<br>Pursuing optimization of domestic PH<br>Closure of Ichihara PH plant by FY2026 ★ | |
| PTA& PET | Indonesia PTA business share transfer | Thailand PTA & PET business partial share transfer | 2023: Iwakuni-Ohtake PTA plant closed<br>2024: Iwakuni-Ohtake PET plant closed | Securing profit through optimal business structure |
| Poly-ure-thane | Bio-PPG joint venture established | | 2023: PPG LLP founded<br>2024: High-performance MDI plant starts up | High-profitability polyurethane business centered on high-performance MDI |
| | Kashima TDI plant closed<br>Omuta MDI plant closed | MCNS dissolved | 2025: Omuta TDI plant to be downsized | |
| PP&PE | High-performance PE plant established in Singapore<br>PP catalyst plant starts up | | 2024: High-performance PP plant to be completed | Highly capital-efficient high-performance polyolefins business |
| | 2 PE lines at Chiba closed<br>1 PP line at Chiba closed | | 2023: 1 PP line at Chiba closed<br>2026: 1 PP line at Chiba to close<br>Mulling optimization via multi-company collaborations | |
| Crack -ers | Chiba LLP founded<br>Withdrawal from Keiyo Ethylene | | (East Japan) 2027: Study into consolidation at Chiba LLP ★<br>(West Japan) Study into establishing a joint operating entity by three companies ★ | Competitive crackers |

Red type: Restructuring Blue type: Bolstering downstream businesses ☆: Progress since last presentation

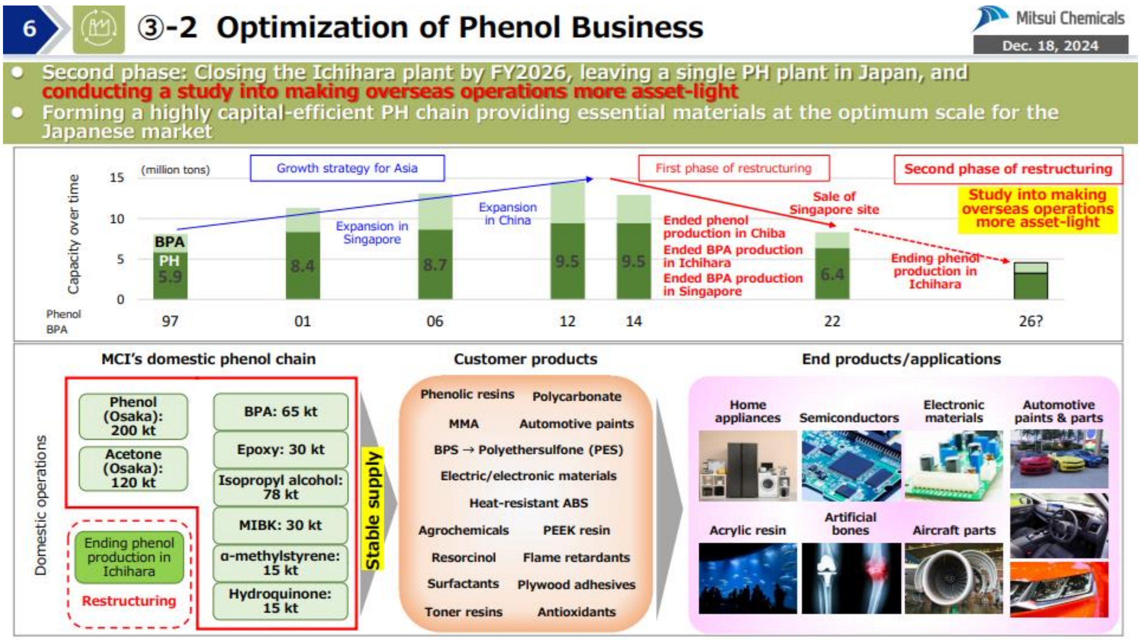
Previously, PTA and PET were being developed extensively as core businesses, but the PTA plant was shut down last fiscal year and the PET plant was also shut down this fiscal year, resulting in a complete withdrawal from domestic production.

The polyurethane business is growing, centered on high-performance MDI, but the market conditions for TDI remain tough, and we will downsize as planned in fiscal 2025.

For PP and PE, profits are improving in fiscal 2024 compared to fiscal 2023 due to progress in price increases, etc.

As for PP, capital efficiency is improving through build and scrap. In connection with the construction of a new plant, we shut down one line of existing equipment last fiscal year and plan to shut down another line in fiscal 2026.

Because the PP/PE market is large, we are considering various measures, including collaboration with other companies.

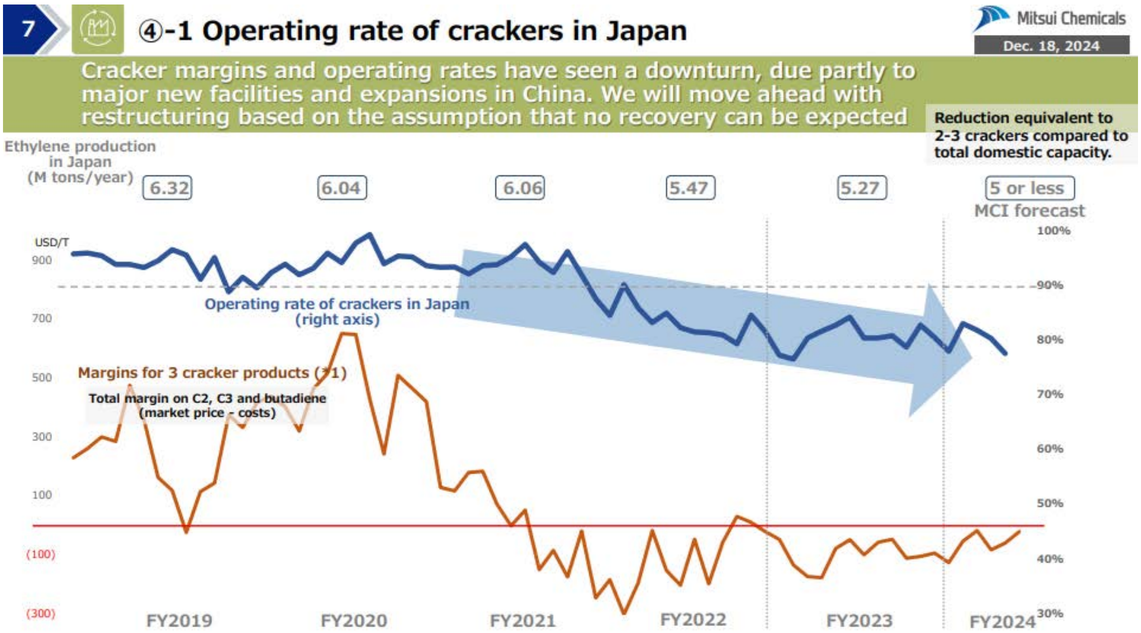



PH was on an expansion path until fiscal 2012, but we have shifted its strategy to restructuring since fiscal 2014, and have decided to shut down the Ichihara plant as part of the second phase of restructuring.

In addition, we are also considering making operations in China more asset-light.

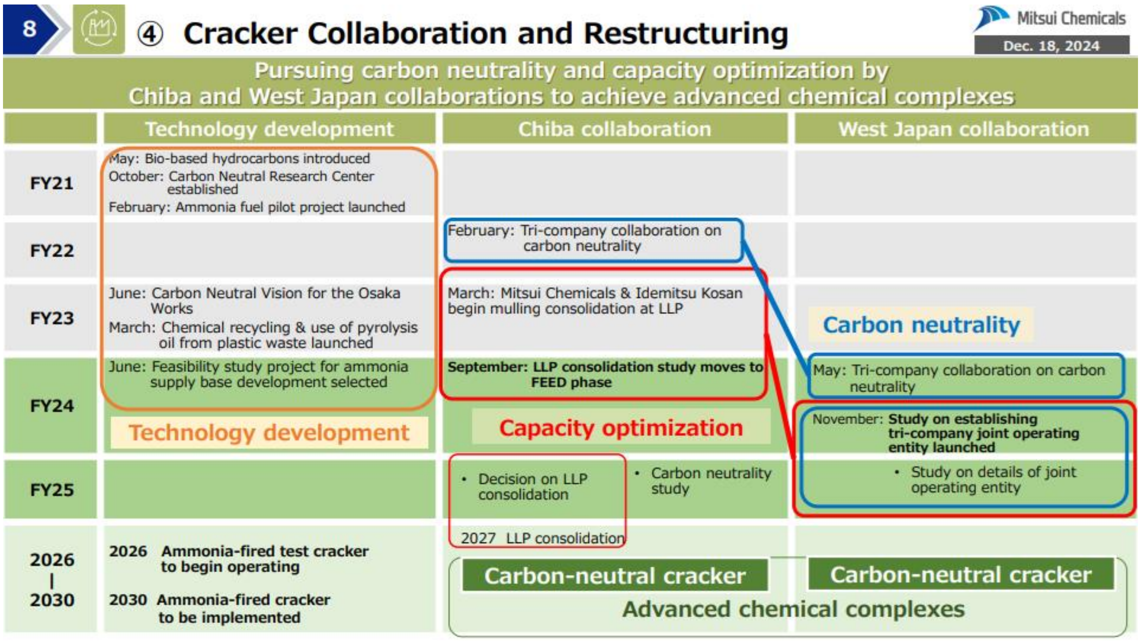
Regarding the fact that the shutdown of the Ichihara plant will mean that we will be limited to just one plant at the Osaka Works, there have been concerns from our customers from the perspective of BCP, so we recognize that optimizing operations to ensure a stable supply is an important issue.

As our upstream operations cover a wide range of final products and applications, we will work to ensure that they do not adversely affect the various downstream industries.




The operating rate of domestic crackers continues to decline, and domestic ethylene production in fiscal 2024 is expected to fall below 5 million tons.

This is equivalent to the production volume of two to three crackers, and we are currently examining the issues surrounding the crackers, assuming that operations cannot be restored in the future.




In addition to the issue of production capacity, crackers need to address the major challenge of achieving carbon neutrality, so our Group has been working on technological development as a first step.

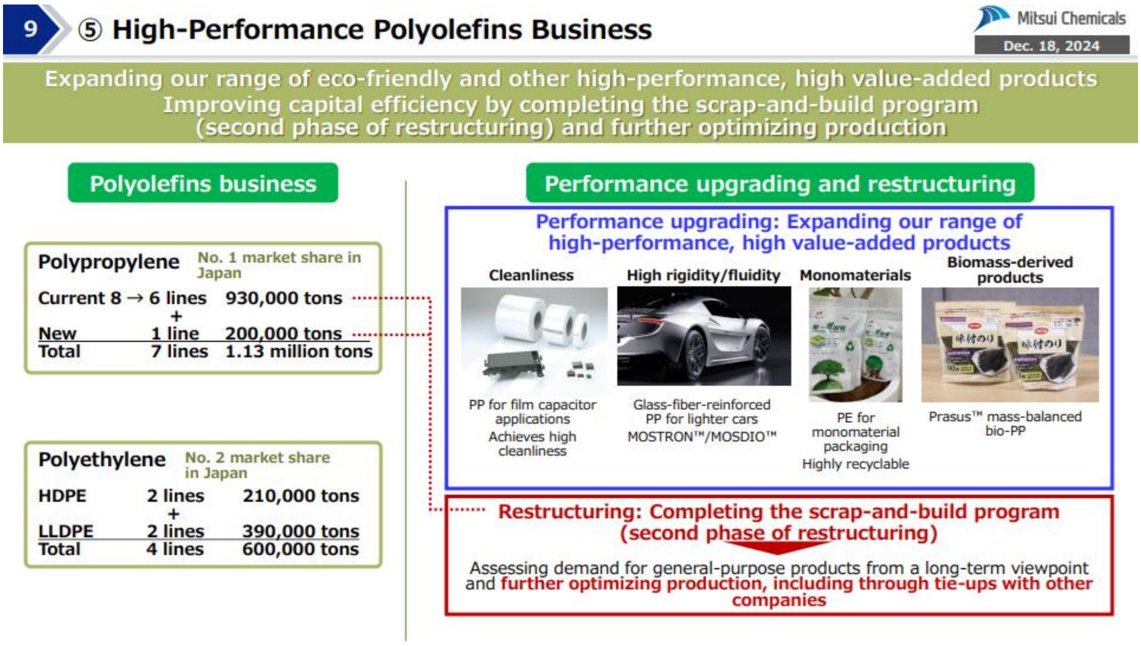
From fiscal 2021, we have been promoting technological development such as the introduction of bio-based hydrocarbons and ammonia-fired cracker, and from fiscal 2023, we have also been working on regional collaboration regarding clean ammonia in the Osaka area.

Regarding the crackers in the Keiyo area, we have begun considering carbon neutrality from fiscal 2022 in collaboration with Sumitomo Chemical and Maruzen Petrochemical, and in order to optimize capacity, we are also in the FEED phase to consolidate ethylene complexes in LLP with Idemitsu Kosan in fiscal 2024.

We are also rapidly discussing collaboration with Mitsubishi Chemical Corporation and Asahi Kasei Corporation regarding crackers in the western Japan area, and agreed to proceed toward establishing a joint operating entity in November 2024.

We have said until now that we would like to present a grand design for the crackers during fiscal 2024 or fiscal 2025. In fiscal 2025, we will make a final decision on consolidating ethylene complexes in LLP in the Keiyo area and progress with our consideration of carbon neutrality. We will also be deciding on the details of the operation of the joint operating entity in the western Japan area, so we expect the details of the direction of the crackers to be finalized by the end of 2025.

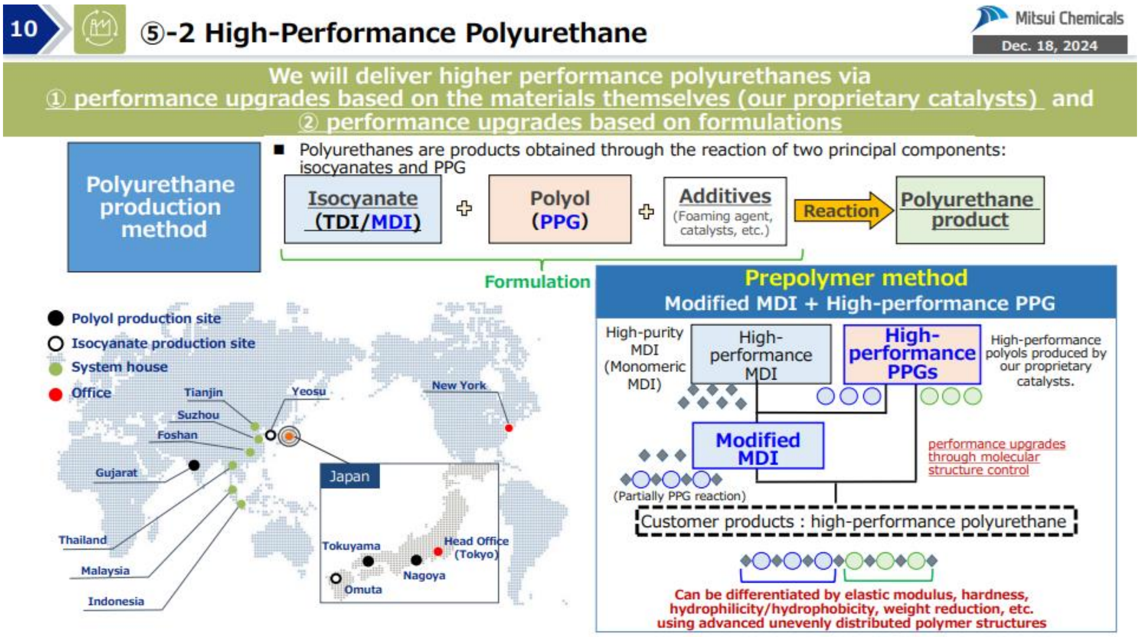
Following this trend, we would like to proceed with the installation of carbon-neutral crackers and the establishment of advanced chemical complexes by fiscal 2030.




Polyolefins profits are on a recovery trend in fiscal 2024 due to the spread of price increases, and we are working to further improve profits through both performance upgrading and restructuring.

In terms of performance upgrading, we are expanding our range of products that can generate profits in areas that do not compete with imported products, such as PP for film capacitor applications, which require high cleanliness, and glass-fiber-reinforced PP for automobiles, which require high rigidity and high fluidity.

On the other hand, as this is a large-scale business, there are still brands that compete with imported products. We will therefore work to restructure these and, in the long term, consider collaborating with other companies.




We are often asked questions such as what high-performance polyurethane is, how it is manufactured, and whether it is a profitable product. High-performance polyurethane is manufactured by reacting TDI/MDI isocyanates, polyols, and our own proprietary catalysts.

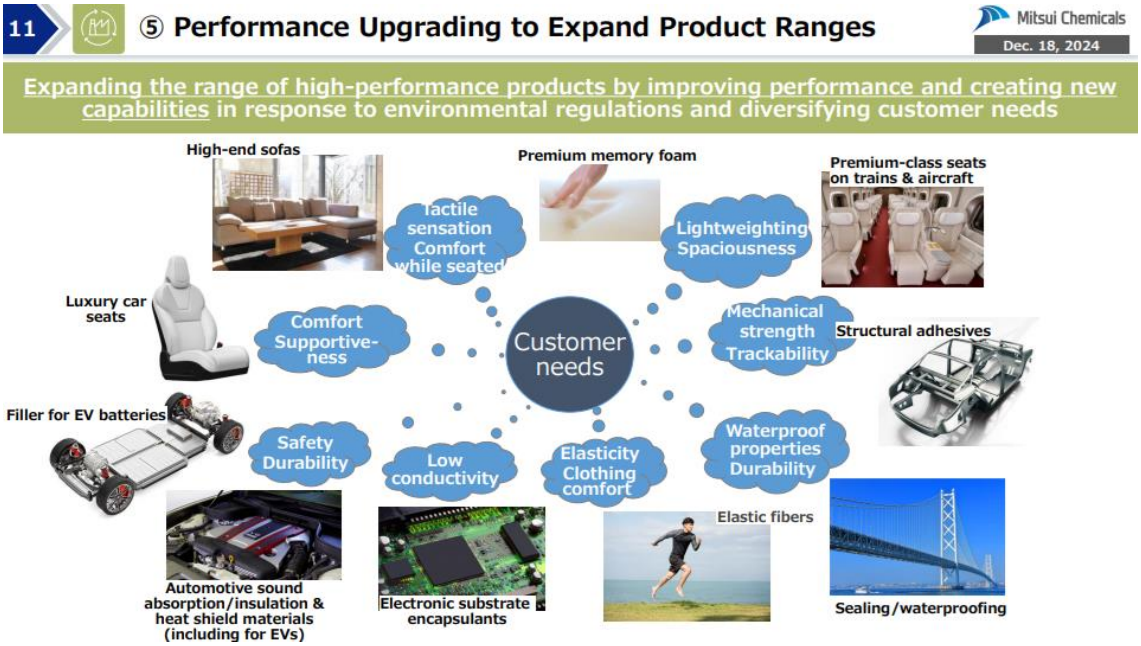
By designing advanced unevenly distributed polymer structures, it is possible to add functions such as elastic modulus, hardness, hydrophilicity/hydrophobicity, and weight reduction.

We carry out molecular design to meet customer needs, and then react the high-performance MDI produced at our Korean base with one of two high-performance polyols produced using a catalyst at our Japanese base to create modified MDI.

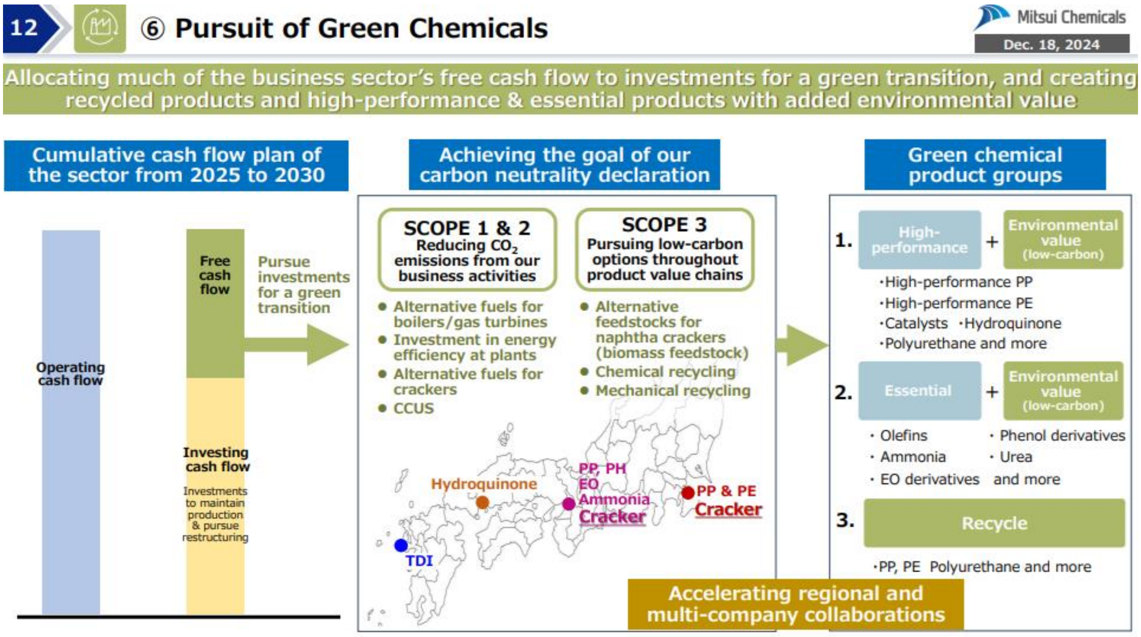
We also provide customers with modified MDI and another type of high-performance polyol, which are then foamed to create polyurethane with a designed molecular structure.

We are the only comprehensive manufacturer in Japan, and one of two in Asia, that has all the components of TDI, MDI, polyols, and catalysts. To manufacture such products, in addition to being a comprehensive manufacturer, it is necessary to have molecular design technology and the compounding formulation technology to realize it.

Our Group is working to shift from general-purpose products to these high-performance polyurethanes.




Specific applications of the high-performance polyurethanes manufactured using the above technologies include various high-end seats, structural adhesives, and electronic substrate materials. With the increasing need for electric vehicles and environmental friendliness, we hope to make profits in markets that are completely different from general-purpose polyurethanes.

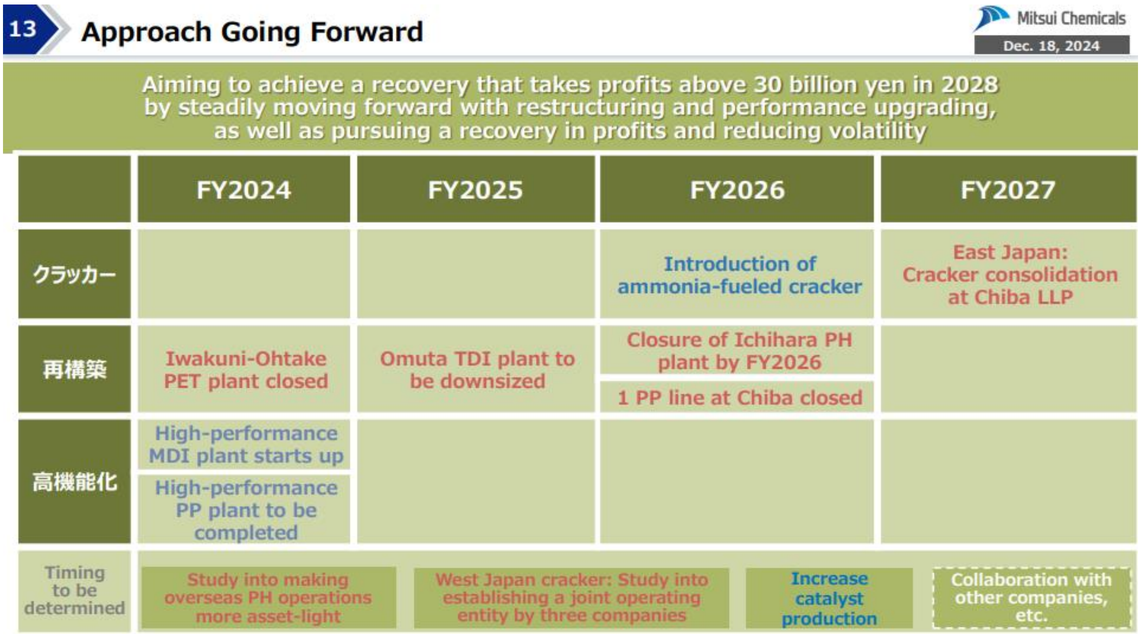



We would like to review our business plan through fiscal 2030 and invest our free cash flow in green chemicals.

Regarding our carbon neutrality declaration, we have set the goal of reducing $CO_2$ generated in our business activities (Scope 1 and 2) and pursuing low-carbon options throughout our product value chains with customers (Scope 3), and are currently conducting various studies to achieve this goal. Our free cash flow up until fiscal 2030 will be mainly directed toward Scope 1 and 2, with the first step being to reduce our own GHG emissions.

Regarding green chemicals, in the future we plan to create three groups of products: one that adds environmental value to high-performance products, one that adds environmental value to essential products, and one that promotes recycling in a circular economy away from crackers.

We would like to proceed with this not only using our own technology, but also through collaboration with other companies and regions.




In fiscal 2024, the PET plant at the Iwakuni-Ohtake Works was shut down as scheduled, and our high-performance MDI plant in Korea began operation and is running at full capacity. Additionally, high-performance PP has also been completed, and the quality is currently being confirmed by the customers.

In fiscal 2025, we will proceed with downsizing of TDI, and in fiscal 2026, we will shut down the PH plant at the Ichihara Works and one PP line at Chiba, and in fiscal 2027, we will proceed with cracker consolidation at Chiba LLP.

In addition, we plan to recover our operating income before special items to 32 billion yen in fiscal 2028 by proceeding with making overseas PH operations more asset-light, establishing a joint operating entity by three cracker companies in western Japan, increasing catalyst production, and other collaborations with other companies from fiscal 2025 to fiscal 2027 although the specific timing is not yet determined.


A global solutions company that
leads change and contributes to a sustainable future

0→1 MAKE IT HAPPEN

Chemistry for Sustainable World

Mitsui Chemicals

*Challenge Diversity One Team*