

# Management Briefing

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**May 27, 2024**  
**Mitsuo Ohya**  
**President**  
**Toray Industries, Inc.**

# Toward a Truly Sustainable Company

Since its establishment, Toray has voiced its strong belief that the Company is a public institution that serves society. Based on an awareness of chemistry-based manufacturing from the time of foundation at the lakeside of the Lake Biwa in Shiga Prefecture, we have nurtured the style of management which entails developing human resources and taking all possible measures to protect the environment. The management style can be considered as sustainability itself, and we inherited the style from our predecessors and passed it from generation to generation.

Amid a drastically changing business environment, Toray will pursue the innovation of the world with our innovative technologies and advanced materials. It is unchanged from the past and it will never be changed in the future. Together with our employees, we will continue to share Toray's mission since its founding to nurture people while contributing to society and the environment through our business activities, and this in turn will drive corporate and human development. We will do our utmost toward a "truly sustainable company."

In proceeding with the five basic strategies set under Medium-Term Management Program, Project AP-G 2025, we have decided management challenges and key management measures to further improve the effectiveness of workplace competency, which is Toray's strength. Now we are proactively working on them.



# Basic Strategies of Medium-Term Management Program, Project AP-G 2025

- Toray Group will achieve sustainable growth driven by the Sustainability Innovation Business and the Digital Innovation Business
- In addition to the five basic strategies, focus across our business operations on balancing profit, cash flow, and asset efficiency.

## Five Basic Strategies of Project AP-G 2025

### Seizing Profit Opportunities

#### Strategy 1. Sustainable growth

Focusing management resources on Sustainability Innovation Business and Digital Innovation Business

#### Strategy 2. Ultimate value creation

Maximizing profitability by making the most of tangible and intangible assets, and by collaborating with external partners

#### Strategy 3. Product and operational excellence

Promoting cross-organizational cost reduction activities leveraging enhancement of quality strength and organizational strength, which are the sources of competitiveness

### Strengthening the Management Foundation

#### Strategy 4. Enhancement of people-centric management

Preserving and further building upon the legacy of our corporate culture, which prioritizes developing people, while promoting individual career development, and improving job satisfaction

#### Strategy 5. Risk management and governance

Ensuring sound organizational management by enhancing internal controls and improving management capabilities

# Toray Management Challenges

## Toray's Vision

- **Achieving the Toray Group Sustainability Vision**  
(both in growth and social contribution)
- **People-centric management**
- **Securing confidence from capital markets and stakeholders**

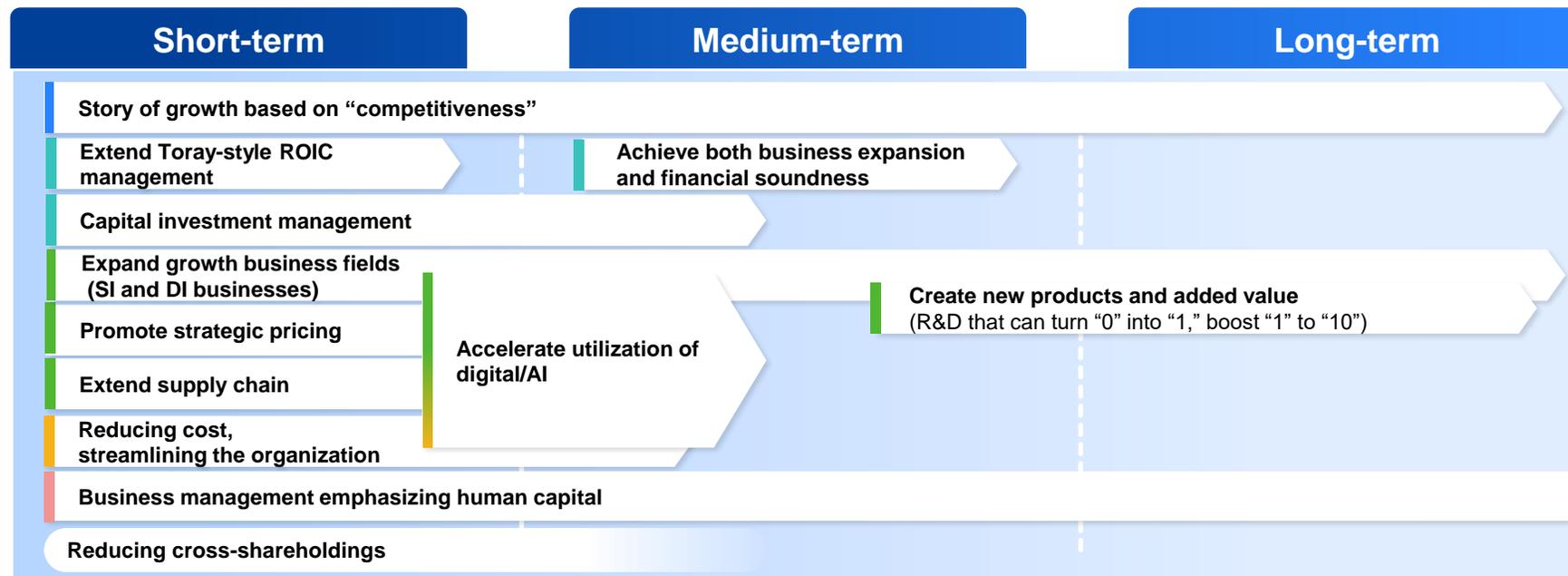
## Identified Issues

- **Sustainable growth and business expansion: Secure resources for future growth**
  - Improve current profitability (short-term) ⇒ **Generate cash**
  - Achieve AP-G 2025 (medium-term) ⇒ **Allocate management resources to priority strategic businesses**
  - Fulfill societal mission and expanding business (long-term) ⇒ **Achieve results in capital investment and research**
- **Changes in global business environment ⇒ Move with sense of speed (transcend organizational barriers)**
- **Intensified competition ⇒ Enhance competitiveness**

## Steps to Take

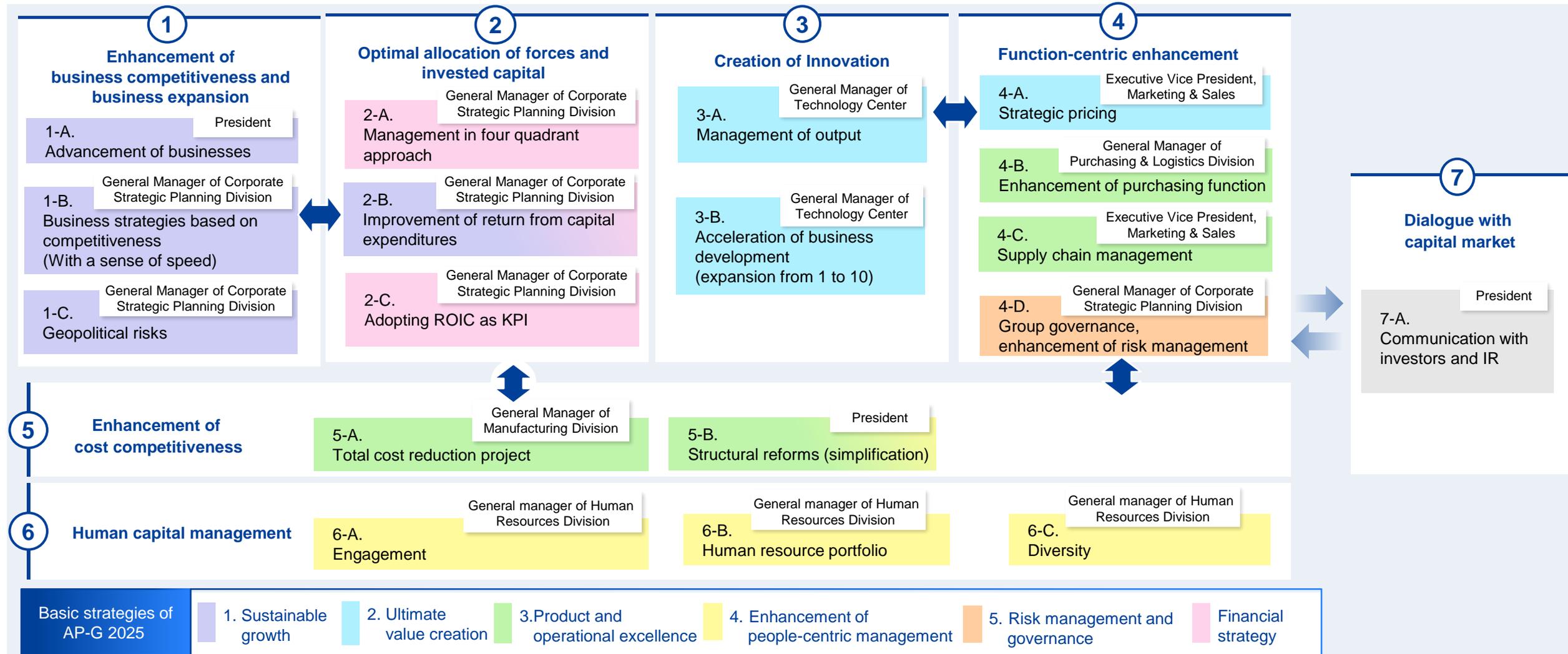
- **Establish priority management measures in line with a time frame**
- **Identify and address cross-business challenges**
- **Enhance effectiveness**

Incorporate into Specific Management Measures and Issues



# Toray's Key Management Measures

Given the changes in the business environment, we have re-organized and prioritized the basic strategies and specific measures of AP-G 2025 as “key management measures.” In addition, we have assigned the members of the board as persons in charge of execution to increase effectiveness.



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# Promotion of the Medium-Term Management Program, Project AP-G 2025

# Toray's Business Fields and Growth Potential

Segment	FY 2013 – FY 2023		FY 2023 – FY 2025 (AP-G 2025)	
	CAGR of Revenue	ROIC of FY 2023	CAGR of Revenue	ROIC Target of FY 2025
Fibers & Textiles	+2.6%	6% <sup>1</sup>	+2.8%	7% <sup>5</sup>
Performance Chemicals	+2.2%	4% <sup>2</sup> <sup>3</sup>	+8.3%	8% <sup>6</sup> <sup>7</sup> <sup>8</sup>
Carbon Fiber Composite Materials	<b>+9.9%</b>	2% <sup>4</sup>	<b>+12.9%</b>	4% <sup>9</sup>
Environment & Engineering	+2.1%	8%	<b>+7.1%</b>	9% <sup>10</sup>
Life Science	-1.1%	-2%	+7.2%	3% <sup>11</sup>
<b>Total</b>	<b>+3.0%</b>	2.8%	<b>+6.6%</b>	About 5%

## Business fields that need improvement (Short to Medium-term)

- <sup>1</sup> PP spunbond, polyester staple fiber
- <sup>2</sup> PET film
- <sup>3</sup> ABS resin (TPM)
- <sup>4</sup> Large tow (Zoltek)

## Core growth business fields in each segment (Medium to Long-term)

- <sup>5</sup> Fibers & Textiles: Airbag textiles, ultra-microfiber nonwoven fabric, garments
- <sup>6</sup> Resins: PPS resin (xEV)
- <sup>7</sup> Film: MLCC release film, ultrathin film for capacitor
- <sup>8</sup> Electronic & information materials: Semiconductor and OLED-related materials
- <sup>9</sup> Carbon fiber: Aircraft and hydrogen tank applications
- <sup>10</sup> Water treatment: Reverse osmosis (RO) membrane
- <sup>11</sup> Pharmaceutical

# Business Structure Reform Based on “Four Categories of Growth Potential and Profitability”

- For specific businesses and companies which have significant impact on the entire Group, implement Projects to Improve Profits of Specified Businesses and Companies
- Business advancement through business strategies that match “business characteristics” and “competitiveness”



1. Thorough profitability improvement for loss-making business and companies.
2. For specific businesses and companies with large capital investment, implementation of the Projects to Improve Profits of Specified Businesses and Companies “Darwin Project (abbreviated as D Pro)”, which sets and executes short-term profit improvement measures as well as medium- and long-term tasks such as restructuring of production capacity.

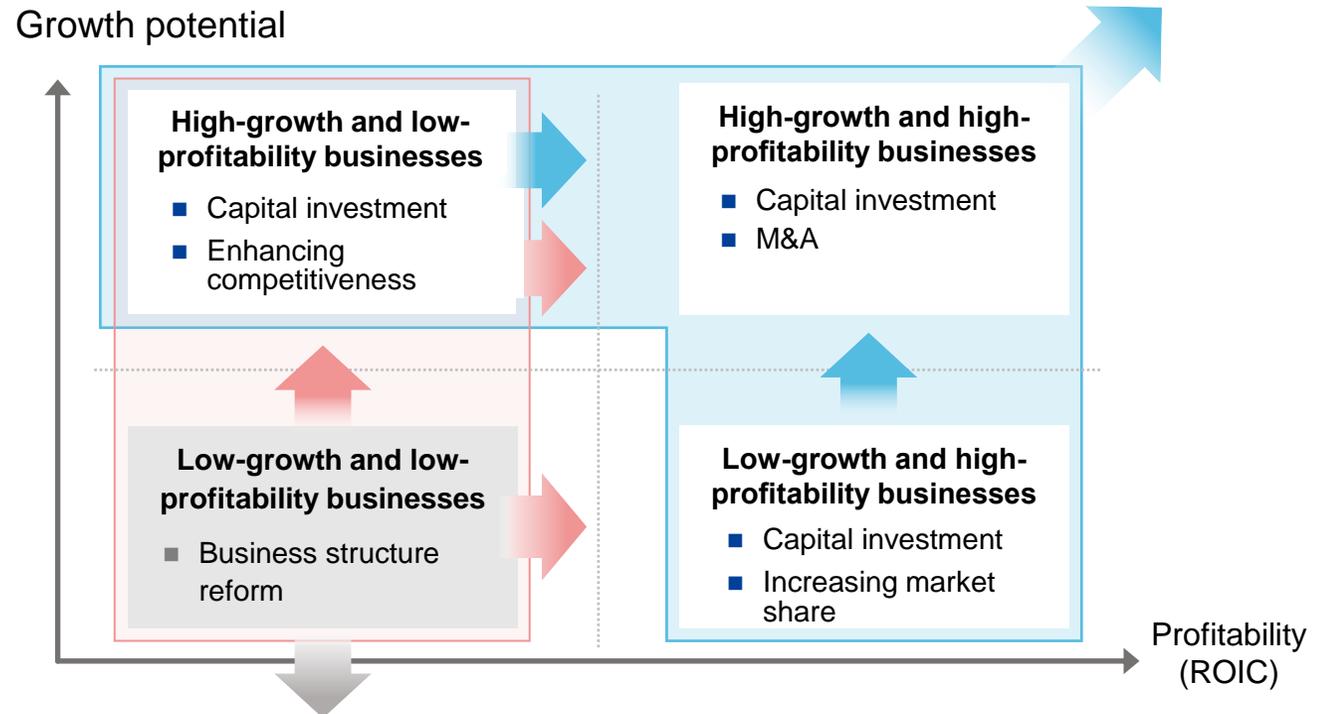
## Examples of businesses

- PP spunbond
- U.S. and Europe film businesses
- ABS resins
- Large tow carbon fiber

3. Introduction and implementation of the “Rules on studying withdrawal/ downsizing.”



## Reallocation of management resources from the perspective of “competitiveness” (the third axis)



# The Projects to Improve Profits of Specified Businesses and Companies (Darwin Project)

The Projects to Improve Profits of Specified Businesses and Companies (aka: Darwin project) Project leader: President



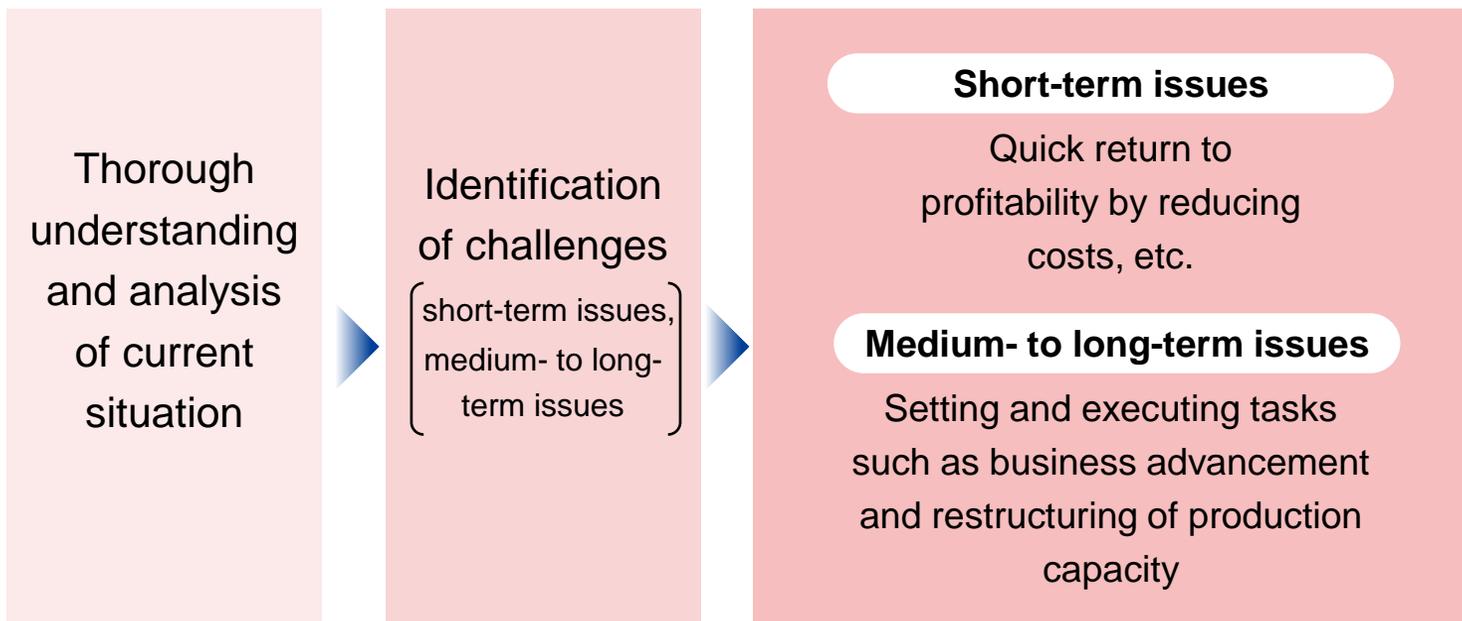
Charles Darwin's concept:

It is not the strongest of the species that survives, not the most intelligent that survives.

**It is the one that is the most adaptable to change.**



Business	Specified Business/Company
Fibers & Textiles	PP spunbond*1
Fibers & Textiles	Polyester staple fiber*2
Resins, Chemicals	Toray Plastics (Malaysia) (TPM)
Films	Toray Plastics (America) (TPA)
Films	Toray Films Europe (TFE)
Films	Penfibre (PFR)
Carbon Fiber Composite Materials	Zoltek



(\*1) Companies included: Toray Advanced Materials Korea (TAK), Toray Polytech (Nantong)(TPN), Toray Polytech Jakarta (TPJ), Toray Polytech (Foshan) (TPF), Toray International India (TID)

(\*2) Companies included : Toray Industries, Indonesia Toray Synthetics (ITS), Penfibre (PFR), Toray Advanced Materials Korea (TAK)

Restore profitability of businesses/companies whose situation have changed significantly since current medium-term management program was formulated due to structural changes in markets, declining competitiveness due to increase in the number of competitors, etc.

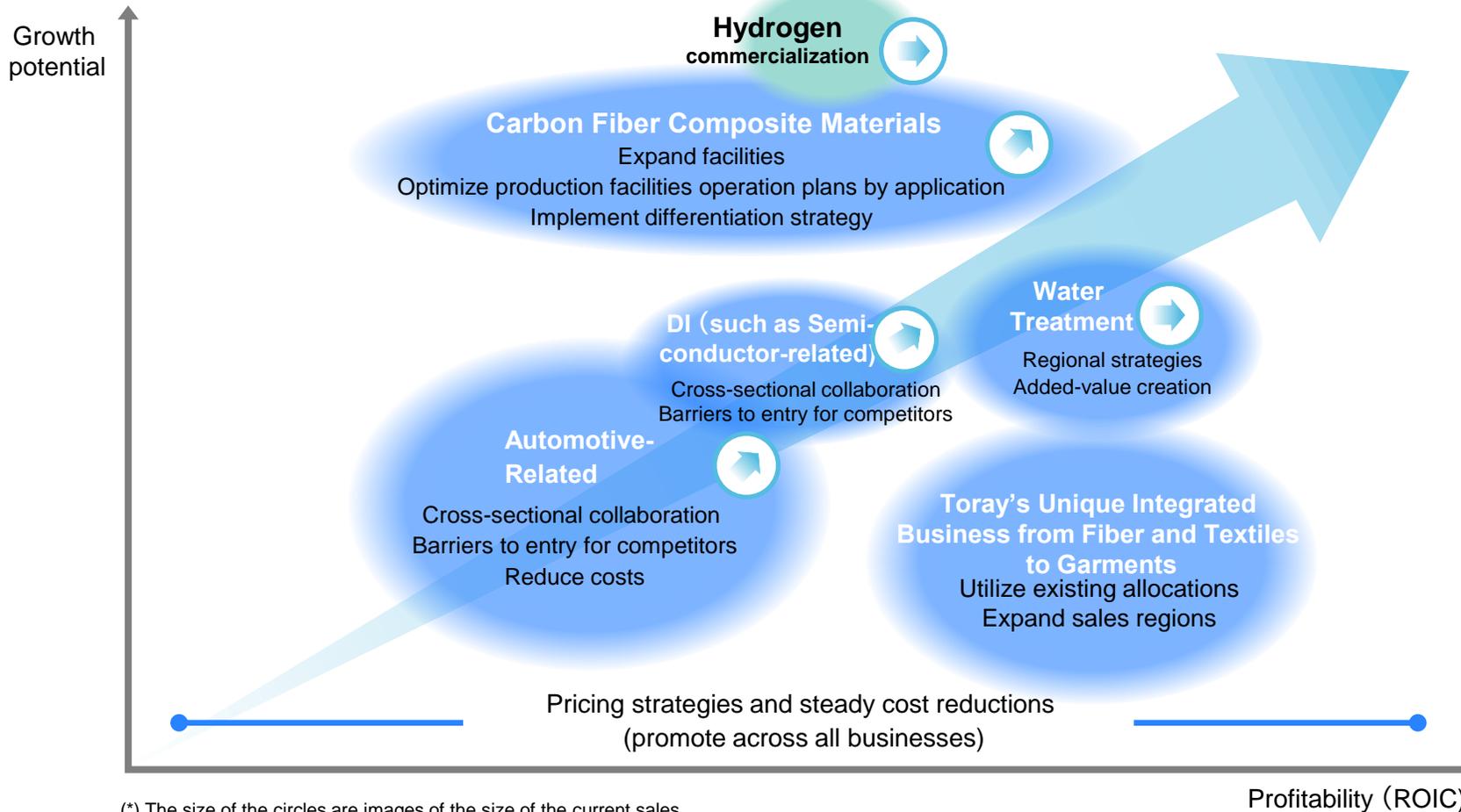
# Results of Restructuring Designated Businesses/Companies

Business/Company	Up to FY 2023	Next Steps
<b>Zoltek</b> (Large-tow carbon fiber)	<ul style="list-style-type: none"> <li>Reduction of total fixed cost in line with utilization rate</li> </ul>	<ul style="list-style-type: none"> <li>Promote strengthening of global operations between Mexico and Hungary</li> <li>Expand applications beyond wind turbine blades, including industrial applications, etc.</li> <li>Reduce utility costs by using renewable energy in Hungary</li> <li>Mexico plant expected to reach full operation in 4Q FY 2024, and become profitable in FY 2024, due to recovery in demand for wind power generation blade applications</li> </ul>
<b>PET film</b> (U.S. and Europe)	<ul style="list-style-type: none"> <li>Ceased production at the PET film production facilities mainly for general-purpose products</li> <li>Reduction of total fixed cost in line with utilization rate</li> <li>Promoted strategic pricing</li> </ul>	<ul style="list-style-type: none"> <li>Global supply of differentiated products Convert from general-purpose products to added-value products (MLCC release film applications, etc.)</li> <li>Optimize production capacity or retire assets in the U.S. and Europe</li> <li>TPA/TFE expected to be profitable in FY 2024</li> </ul>
<b>PP spunbond</b>	<ul style="list-style-type: none"> <li>Reduction of fixed costs in line with review of the production capacity including shutdown of production lines</li> </ul>	<ul style="list-style-type: none"> <li>Promote differentiation, develop new applications, optimize production scale</li> <li>Promote strategic pricing</li> <li>Aim to restore profitability from second half of FY 2024</li> </ul>
<b>Toray Plastics Malaysia</b> (ABS resin)	<ul style="list-style-type: none"> <li>Improved product mix</li> <li>Reduced fixed costs</li> <li>Restored profitability in second half of FY 2023</li> </ul>	<ul style="list-style-type: none"> <li>Cultivate new customers by promoting circular economy</li> <li>Promote creating added-value products</li> <li>Switch to alternative materials</li> </ul>
<b>Battery separator film</b> (other than designated companies)	<ul style="list-style-type: none"> <li>Retired production facilities</li> </ul>	<ul style="list-style-type: none"> <li>Continued business structure reform</li> </ul>

Improvement in core operating income from FY 2023: Forecasted to be tens of billions of yen

# —Strengthening of Growth Business Fields Based on "Four Categories of Growth Potential and Profitability"—

## Toray's High-Growth, High-Profitability Businesses (image\*)



- Optimal strategies for businesses with high competitiveness (quality, share, technology, supply chain, etc.) in the market
- Promote Toray-style ROIC improvements that increase profits and expand business while maintaining financial soundness
- Improve profitability by differentiation for businesses that are high growth, but require large initial investments (carbon fiber, etc.)
- Expand high-profitability businesses (ex. Toray's unique integrated business from fiber and textiles to garments) through asset-light strategy

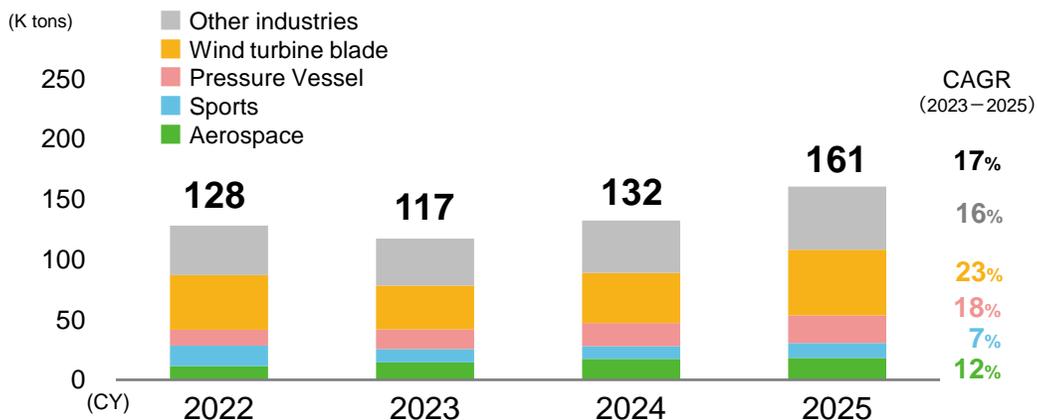
# Business Strategies and Challenges of the Carbon Fiber Composite Materials Business –Basic Policies for Expansion –

## Business Environment

Applications that are expected to expand in demand from 2026 onwards

Carbon fiber demand scale In 2030, compared to 2025			Carbon fiber demand scale around 2030	Space industry market size In 2040 compared to 2025
Hydrogen tank	Offshore wind power generation	UAM	Next generation aircraft	Space (Rocket)
4-fold (90,000t)	1.3-fold (92,000t)	10-fold (2,000t)	3,000t	2.3-fold (1 trillion \$)

### Demand forecast by application



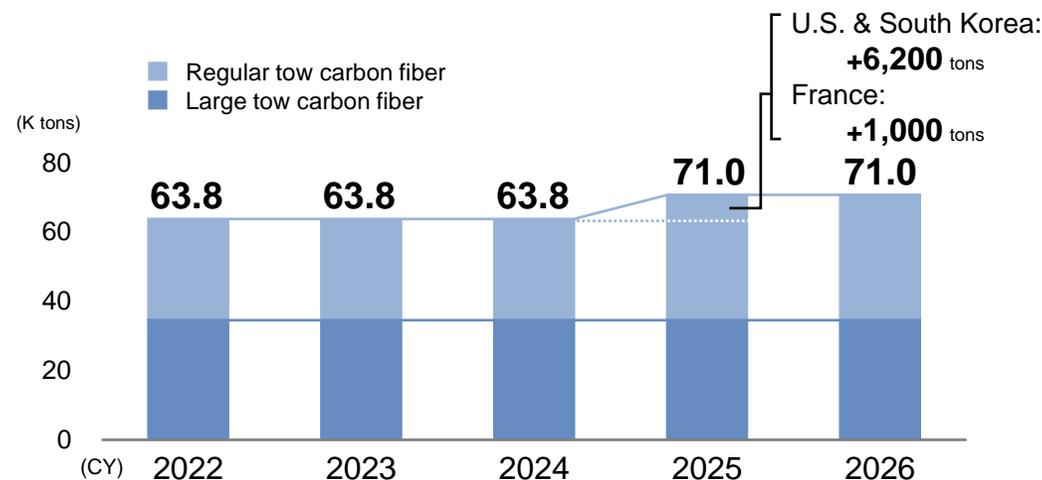
## Basic Policies

- Contribution to realization of the carbon neutral society by providing high-quality products
- Business expansion by enhancement of production capacities at the global production sites

Core operating income of the Carbon Fiber Composite Materials segment (billion yen)

FY 2022 Actual	FY 2023 Actual	FY 2024 Forecast	Target of AP-G 2025
15.9	13.2	21.0	36.0

### Production Capacity of Toray Group



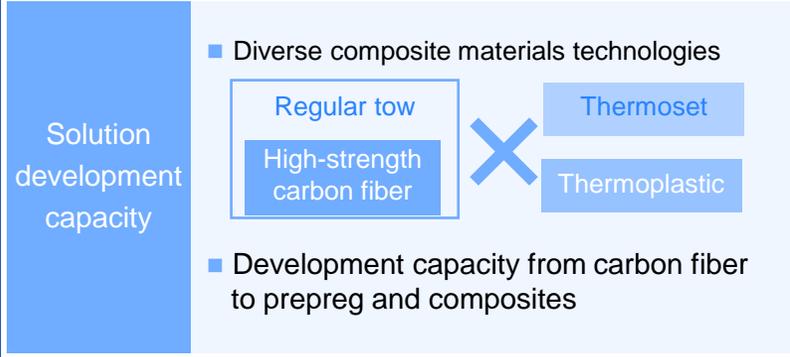
(\*) Based on the Morgan Stanley's Projection <https://www.morganstanley.com/ideas/investing-in-space>

# Strategies and Challenges of the Carbon Fiber Composite Materials Business: Applications and Product Strategies

## Aircraft applications

### Expand business by combining high-strength carbon fiber and prepreg

- (1) Short-term: Ensure to capture recovering demand for commercial aircraft
- (2) Medium-term: Develop and expand for UAM and space applications
- (3) Long-term: Promote development for next-generation aircraft



## Industrial Applications

### Expand applications by developing new products of carbon fiber

- (1) Expand business for compressed natural gas/compressed hydrogen gas applications
- (2) Strengthen competitiveness of product quality of carbon fiber and prepreg
- (3) Improve productivity of facilities and reduce costs through process engineering capacity



## Strategies for large-tow carbon fiber

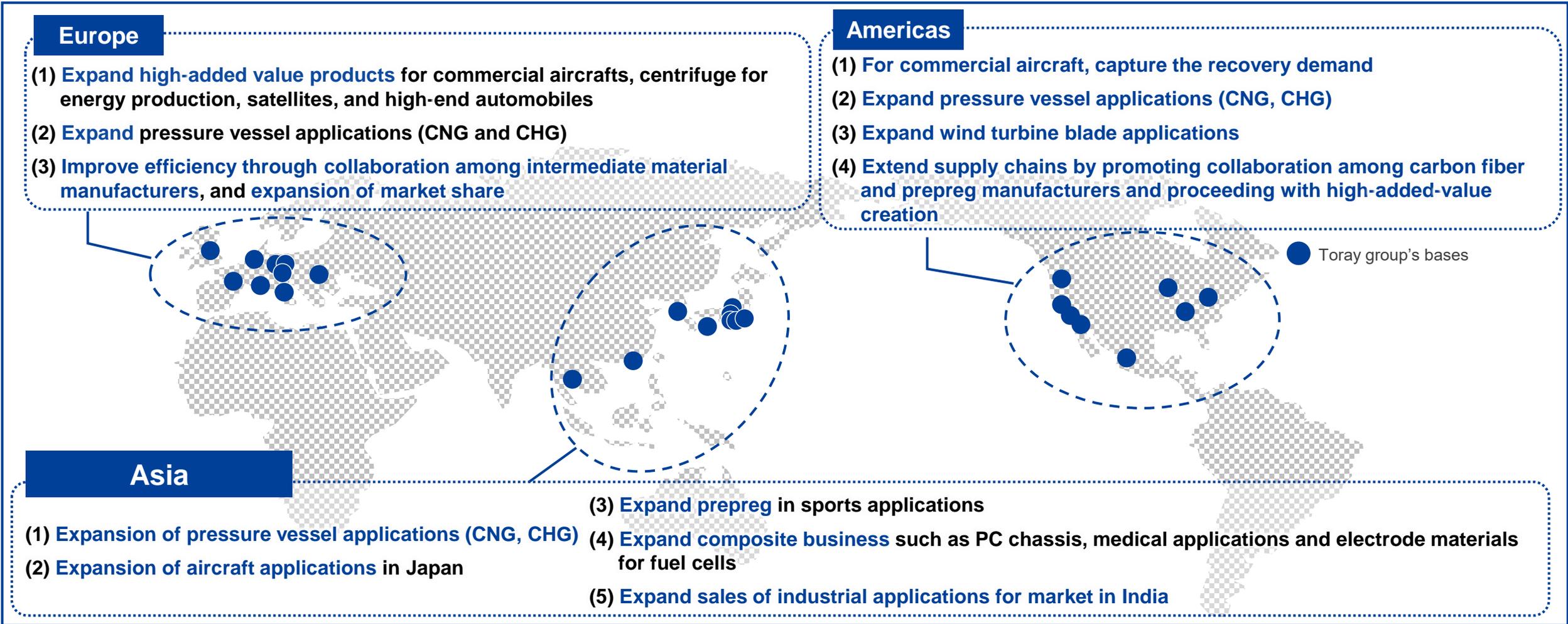
### Quick restoring profitability and restructuring through Darwin Project

- (1) Capture demand for wind turbine blade applications, with expected recovery from 2025 onward
- (2) Expand global operations by leveraging cost competitiveness of plant in Mexico
- (3) Reduce costs at plant in Hungary
- (4) Develop high-quality grade for offshore wind power generation and long turbine blades
- (5) Develop new applications other than wind turbine blade, and collaboration among prepreg manufacturers based in Europe



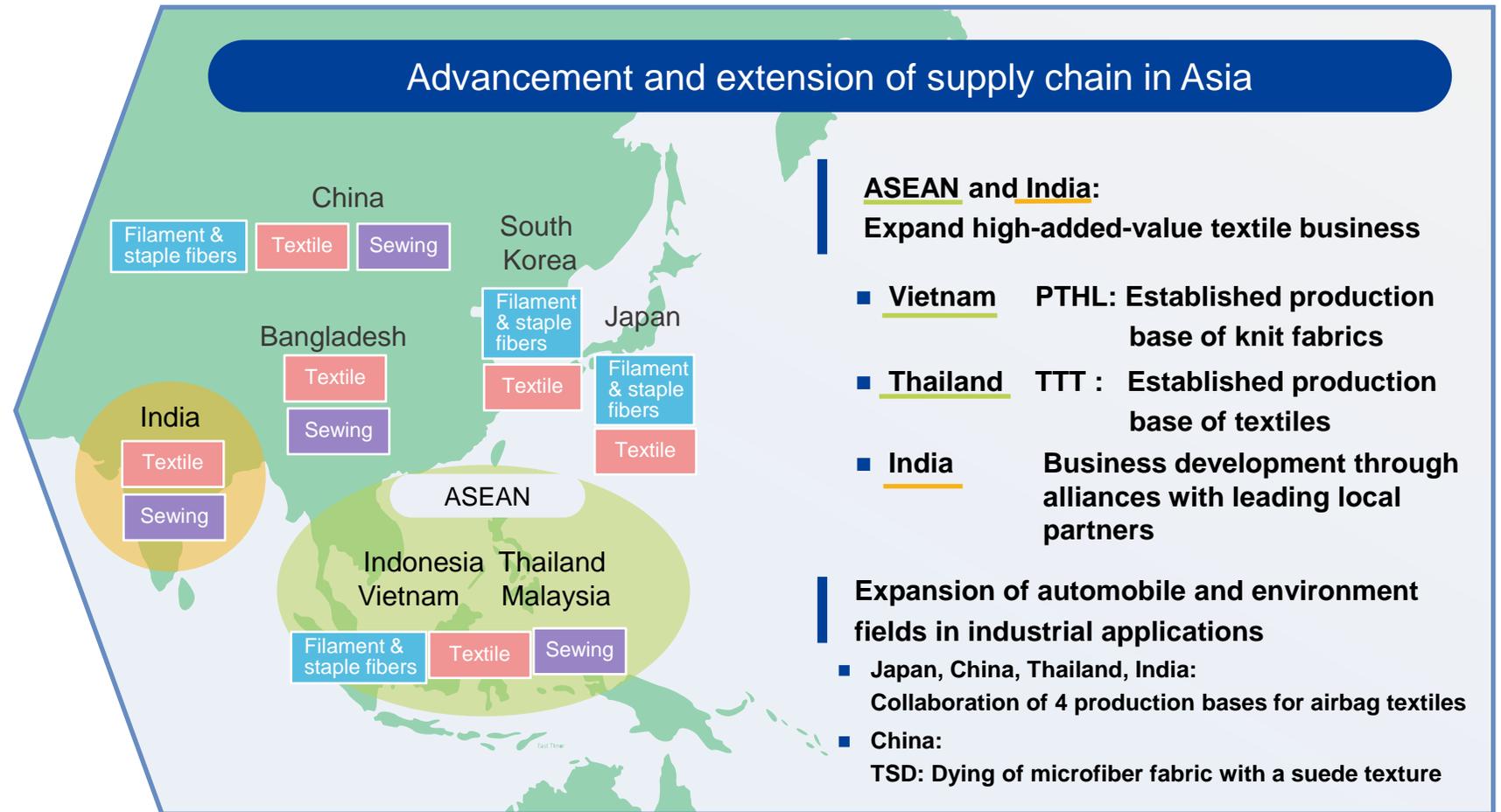
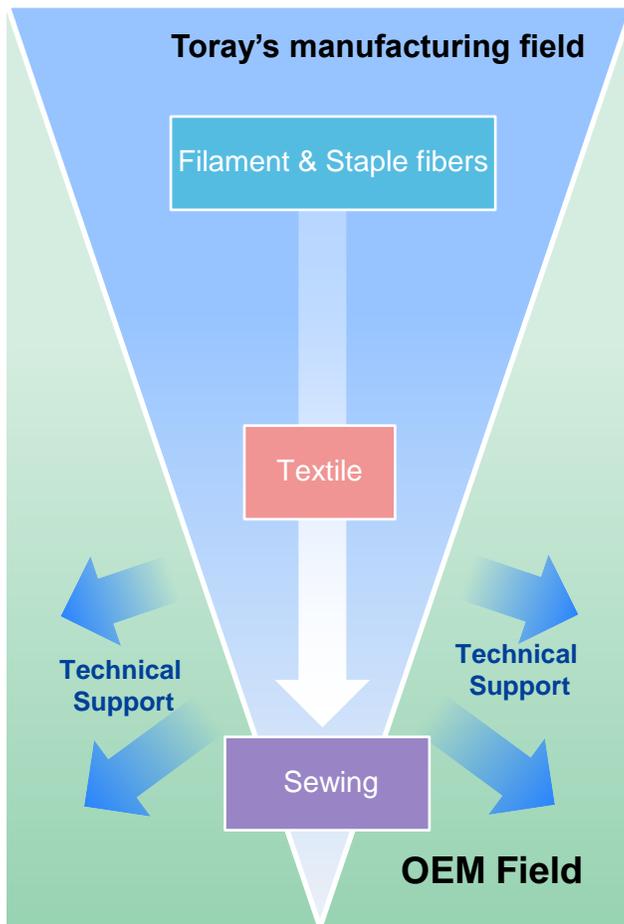
# Strategies and Challenges of the Carbon Fiber Composite Materials Business: Regional Strategies

- Leveraging strengths of having bases in each region, implement application strategies unique to each region (economic security and energy policy in each country and major customers)
- Global operation with optimized combination of production at consumer regions and production at suitable regions



# Expansion of Toray's Integrated Fibers & Textiles Business by Supply Chain Management

- Establish an asset-light strategy, integrated supply chain by strategic use of OEM, with Toray's technologies and development capabilities
- Expanding profitability in the entire supply chain by providing optimal solutions to customer needs



# Water Treatment Business Development

## RO Membrane Business Basic Policy

- **Achieve No.1 global market share by 2025**  
**Promote global business development in growth fields, maintain No.1 position in seawater desalination, and enhance presence in U.S. and China**

Maintaining De Facto Standard

### Seawater Desalination

- Maintain Toray's position as de facto industry standard
- Capture replacement demand by strengthening technical services

**Basic Strategies**

- Maintain No.1 position in seawater desalination by establishing Toray as de facto standard
- Establish stable supply system
- Capture replacement demand at early stage by enhancing technical services
- Further promote localization



Continue construction of large-scale seawater desalination plants worldwide

**Main Issues**

- Expanding supply capacity in response to increased demand
- Thoroughly reduce costs
- Developing new products with excellent pressure resistance and durability
- Strengthening local technical service function

Growth Business Field

### Wastewater Reuse

Changing wastewater into new water resources with the integrated membrane system (IMS: UF membranes + RO membranes, MBR + RO membranes)

**Basic Strategies**

- Create added value and strengthen profitability by providing total membrane solutions leveraging strengths as full line-up membrane manufacturer
- Accelerate global business expansion through focused allocation of resources



Market expanding 10%/year

**Main Issues**

- Developing new products for reusing wastewater
- Accumulating IMS knowhow and advocating tech support
- Responding to regionally dispersed demand
- Strengthening ability to disseminate info through dedicated website

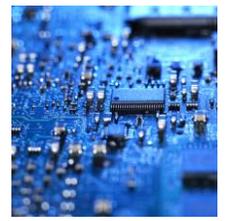
Growth Business Field

### Ultrapure Water for Semiconductors

Emphasizing added value through global expansion of new high-performance products

**Basic Strategies**

- Stable and continuous supply of high-added-value products
- Strengthen partnerships with leading engineering companies and end users in the world



More advanced semiconductors  
 ⇒ Ultra pure water (Enhanced silica removal performance)

**Main Issues**

- Intensive promotion of products with better silica removal performance
- Developing energy-saving products that maintain removal performance
- Promoting mass production and cost reduction

# Strategic Pricing

- ❑ In addition to product excellence, Toray competitiveness originates from the added value provided by its supply and operational capacities
- ❑ Ensure accurate understanding of Toray's product excellence and added value, secure appropriate compensation commensurate with value
- ❑ Strategies for high-added-value creation that interconnect with creation of innovation

## Improve Workplace Competency on Pricing

Improve organizational capacity and awareness for implementing value-based pricing

- Training on pricing-related data analysis

Examples of Training Themes on Data Analysis

- Calculating fair prices for PET film
- Verifying resin material pricing models
- Building prepreg pricing analysis model

- Workplace pricing education

- Share best practices internally and externally
- Knowledge shared by outside specialists

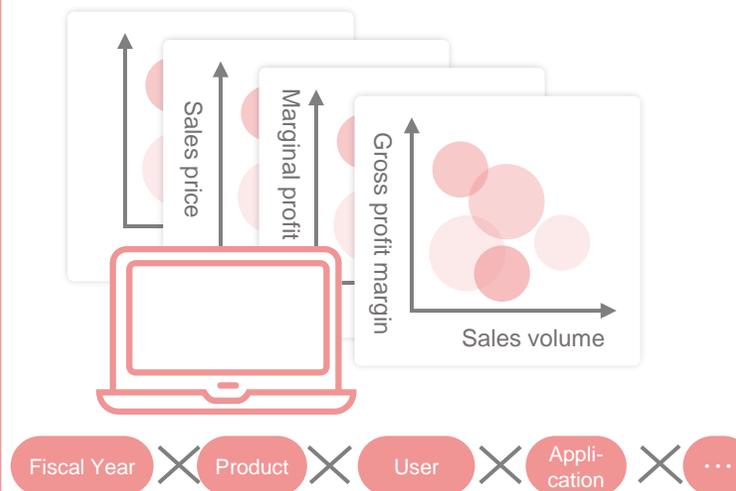
- Establish innovation cycle that leads to high-added-value solutions

Recognize what is considered value to customers  
⇒ Create high-value-added products through collaboration among production, sales, and R&D

## Establish Data Infrastructure to Support Implementation

Develop system infrastructure to quickly respond to issues

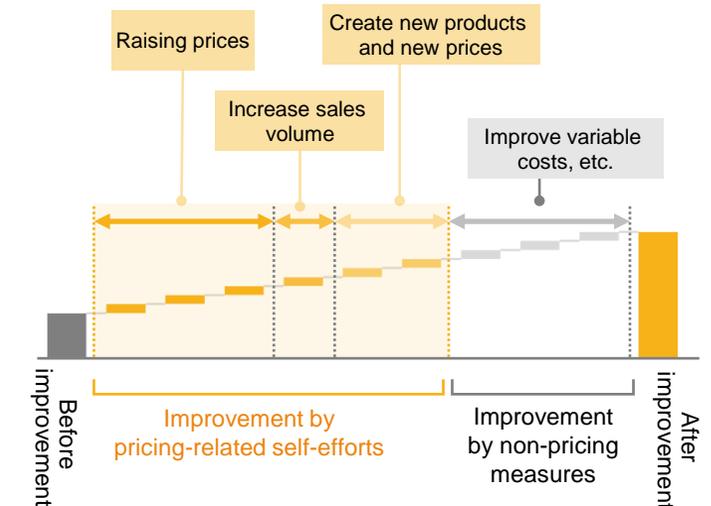
Tool for visualizing pricing variations for the same product



## Develop Mechanisms to Manage Implementation

Implement cross-company management and follow up to achieve targets

Establish uniform calculation rules and monitoring mechanism for effective pricing



# Strengthening the Procurement Function

**Past** Coordinated purchasing at base/region level + centralized purchasing by the head office of main raw materials (AN, MEG, N66)

**Future** Consolidate proportional cost reduction measures for all Group companies with large purchasing volumes and share best practices at each business base

Strengthen internal collaboration at the head office, and develop products with diversified raw material sources, including imports, by engineering technologies. Global expansion

→ Strengthen global BCP and accelerate proportional cost reductions

## China

- Promoted **intraregional cooperation** in East and South China from 2010
- Development of new suppliers as the volume of raw materials for production has increased significantly.
- Expanded local procurement in China.

## Korea

Centralized purchasing by TAK for the major raw materials required for affiliates in Korea, China, Indonesia and India

## U.S.A.

Intraregional cooperation from 2021, making full use of DX

## Consolidate BCP and proportional cost reduction activities in each region

- **Centralized purchasing** of major items from 13 plants by Purchasing & Logistics Division
- Centralized purchasing focused on common raw materials (MEG, AN, N66)
- **Diversify raw material sources through collaboration between Manufacturing and Purchasing & Logistics Division**
- Shift from intraregional to global collaboration

- Promote cross-organizational cost reduction activities that leverage the Group's collective strengths
- Roll out a mechanism for sharing information on inter-organizational activities and cost-reduction initiatives group-wide  
Also, enhance efforts to control costs and improve yields at affiliates outside Japan in particular

## Total cost down project

**Cumulative cost reduction of  
200 billion yen over 3 years**

Variable cost reduction activities

Reduction in FY 2023

**45.7 billion yen**

Effect target

125.0 billion yen/ 3 years

Fixed cost reduction activities

Reduction in FY 2023

**21.9 billion yen**

Effect target

60.0 billion yen/ 3 years

Production process innovations

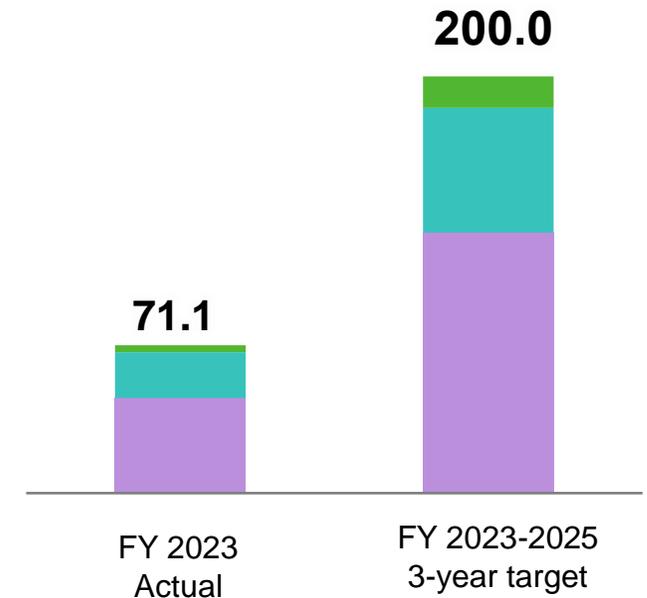
Reduction FY 2023

**3.4 billion yen**

Effect target

15.0 billion yen/ 3 years

(Billion yen)

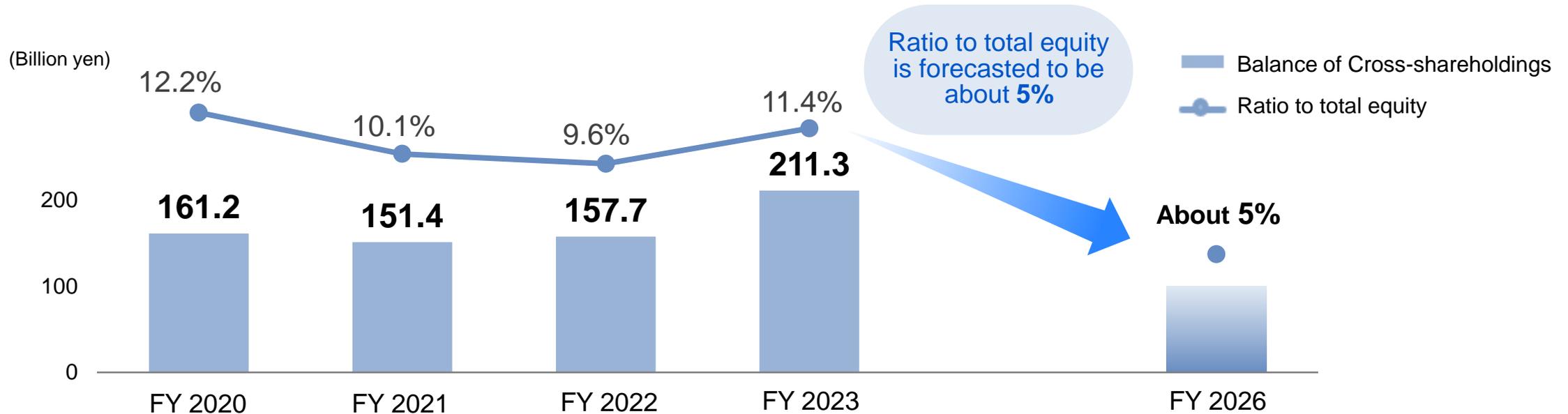


# Reduction of Cross-shareholdings

To accelerate capital efficiency improvement, reduce cross-shareholdings by half

**50% (about 100 billion yen) reduction** in 3 years from FY 2024 to FY 2026

**All the proceeds from sales of cross-shareholdings  
will be used for shareholder returns (share buybacks)**



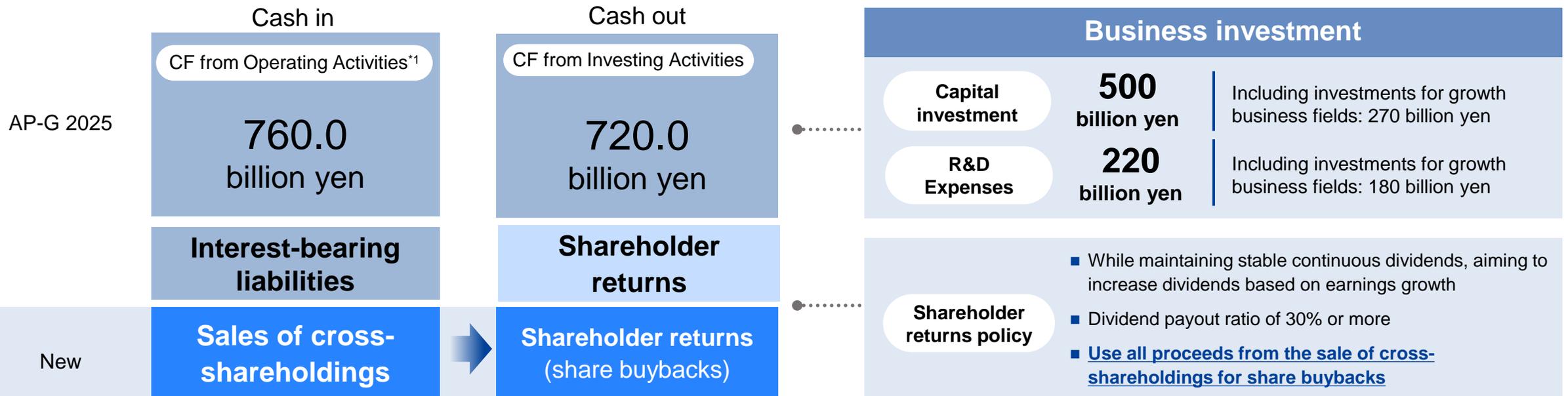
# Capital Allocation

As an addition to the capital allocation under AP-G 2025, we will **reduce cross-shareholdings** and implement **shareholder returns (share buybacks)** with proceeds from the sales

## AP-G 2025 Target

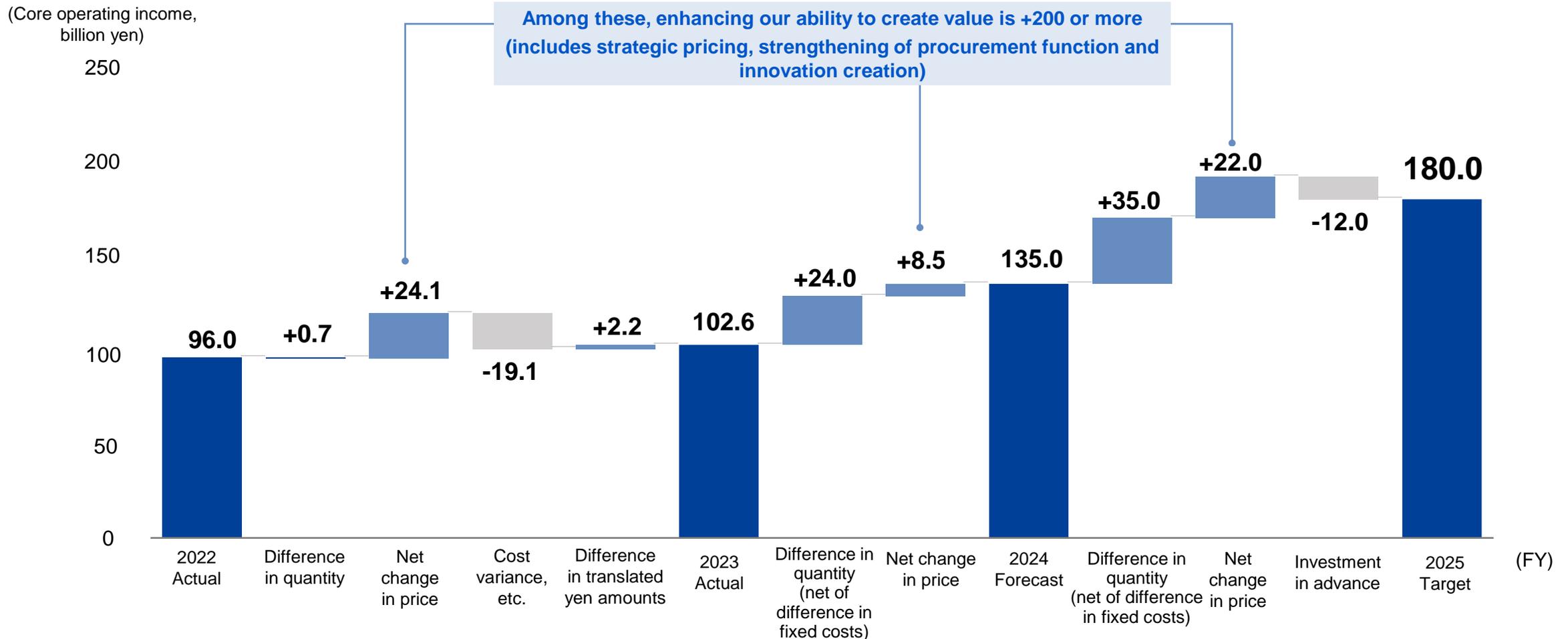
- Free cash flow : Positive (3-year total)
- D/E ratio : 0.7 or lower

## Image of Capital Allocation (FY 2023-2025)



# Breakdown of the Factors of Growth for Achieving the AP-G 2025 Target

Although there is no significant changes in the plan to increase core operating income through increases in “difference in quantity” and “net change in price,” we will revise specific measures to promote as needed, including strategies for each business in response to changes in the business environment and strengthening of procurement functions.



# Progress of AP-G 2025

Billion yen

	FY 2022 Actual	FY 2023 Actual	FY 2024 Forecast	AP-G 2025 FY 2025 Target
<b>Revenue</b>	2,489.3	2,464.6	2,620.0	2,800.0
<b>Core operating income</b>	96.0	102.6	135.0	180.0
<b>Core operating margin</b>	3.9%	4.2%	5%	6%
<b>ROIC*</b>	2.7%	2.8%	Around 4%	Around 5%
<b>ROE</b>	5.0%	1.3%	Around 5%	Around 8%
<b>Free cash flow</b>	237.3 billion yen (3-year total)	64.7 billion yen	—	Positive (3-year total)
<b>D/E ratio</b>	0.62	0.55	Around 0.6	0.7 or lower (Guideline)

\* ROIC = Core Operating Income after Tax / Average Invested Capital

Assumed exchange rate in AP-G 2025: ¥125 / US \$



# Reference

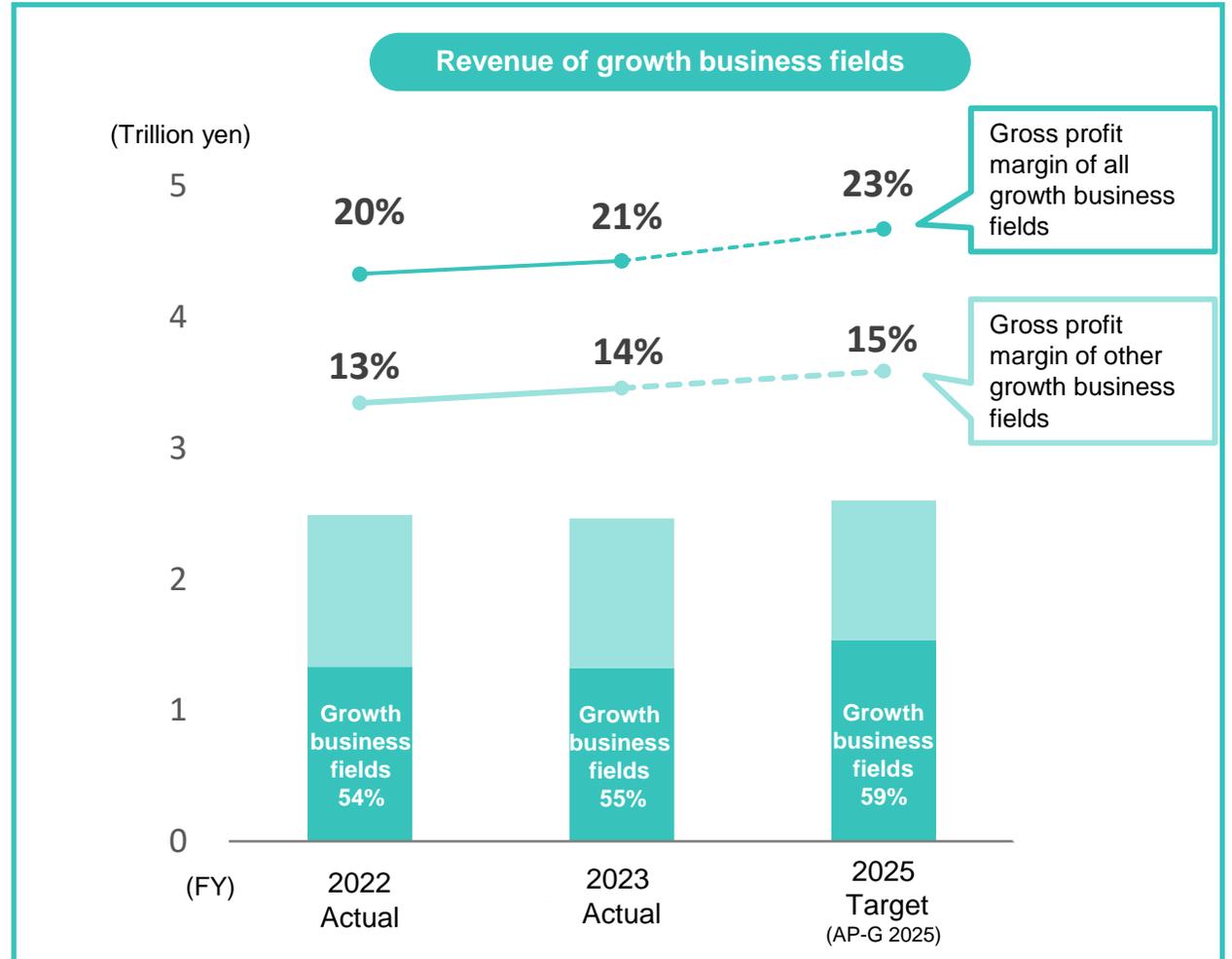
# Toray Group's growth business fields

Expanding revenues from businesses related to Sustainability Innovation Business<sup>(\*1)</sup> and Digital Innovation Business to about 60% of total

## Growth Business Fields under AP-G 2025

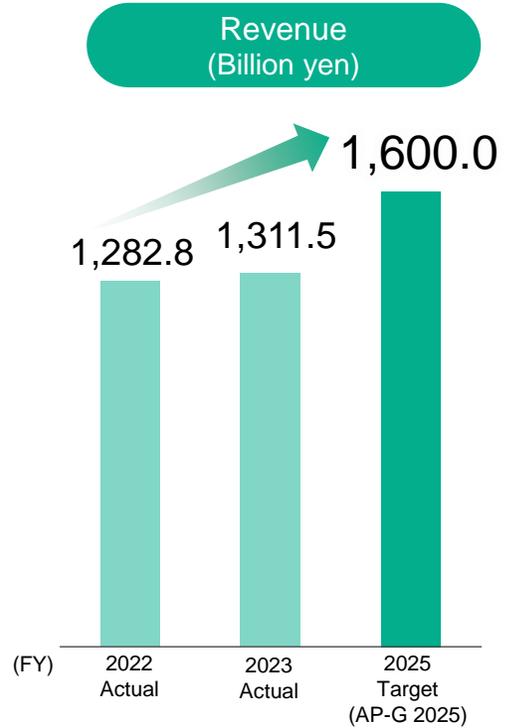
<b>SI Business</b> Sustainability Innovation Business (*1)	1 Products that accelerate measures to counter climate change
	2 Products that facilitate sustainable, recycling-based use of resources and production
	3 Products that help provide clean water and air and reduce environmental impact
	4 Products that help deliver better medical care and hygiene for people worldwide
<b>DI Business</b> Digital Innovation Business	Materials, equipment, technologies, and services that help improve convenience and productivity by supporting the widespread adoption of digital technology

\*1: Group of businesses or products that can help realize the Toray Group Sustainability Vision



# Toray Group's growth business fields

## SI Business Sustainability Innovation



Products that help deliver better medical care and hygiene for people worldwide

Example



Products that help provide clean water and air and reduce environmental impact

Example

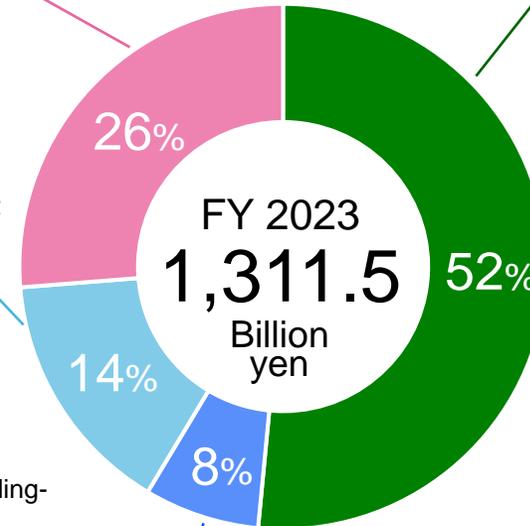


Products that facilitate sustainable, recycling-based use of resources and production

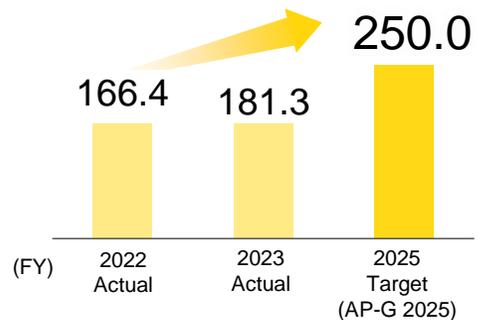


Products that accelerate measures to counter climate change

Example



## DI Business Digital Innovation



Release film for semiconductor molds



Materials for Display



Electronic coating and mounting materials



Semiconductor inspection equipment

# Major Business Activities in FY 2023

## SI Business

- In February 2024, Yamanashi Prefecture and 10 companies including Toray that participate in the technology development, started on-site construction at Suntory Minami Alps Hakushu Water Plant and Suntory Hakushu Distillery in Hokuto City, Yamanashi Pref., to build the components of a large-scale Power-to-gas (P2G) system\* as a total system for decarbonization of the site. The construction site has been selected for demonstration of energy demand shift and utilization technologies for a large-scale P2G system.
- Toray has received a reverse osmosis (RO) membrane order for the Yanbu 4 IWP desalination plant in the Kingdom of Saudi Arabia. Key factors in Toray obtaining this order was robust record in the Middle East established over the past 15 plus years, delivering lower capital investments and operating costs compared to the conventional evaporation method. With the production capacity of 450,000 cubic meters per day of potable water once it is completed, the plant will supply potable water to Madinah region and Makkah.
- Toray launched Toray APOA2-iTQ in Japan on February 22, 2024. This in vitro kit aids with pancreatic cancer diagnostics. The kit measures substances different from existing tumor markers and is expected to detect pancreatic cancer at an early stage, which could not be detected by conventional markers.



## DI Business

- Due to the increase in adoption of OLED displays for smartphones and TVs as well as increase in demand for power semiconductors in line with sophistication of automobiles, the Company is increasing production capacity of photosensitive and non-photosensitive polyimide (PI). In addition, the Company is working on expanding product lineup such as PI without N-Methyl-2-pyrrolidone (NMP).



\*: P2G is a technology to produce hydrogen by water electrolysis using electricity derived from renewable energy, etc. It is globally expected to help expand the introduction of renewable energy and reduce greenhouse gas emissions in order to realize a carbon-neutral society.

# Topics: Technologies and Products

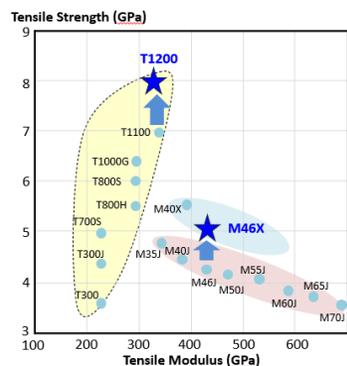
## High tensile strength carbon fiber

### Ultra-high-strength carbon fiber TORAYCA™ T1200

Created TORAYCA™ T1200, which is the world's highest strength carbon fiber with a tensile strength of 8.0 GPa, more than 10% higher than TORAYCA™ T1100. The Company refined its proprietary nanoscale structural control technology to design and achieve an internal structure with high toughness. The Company plans to promote this product to wide range of applications including aircraft applications.

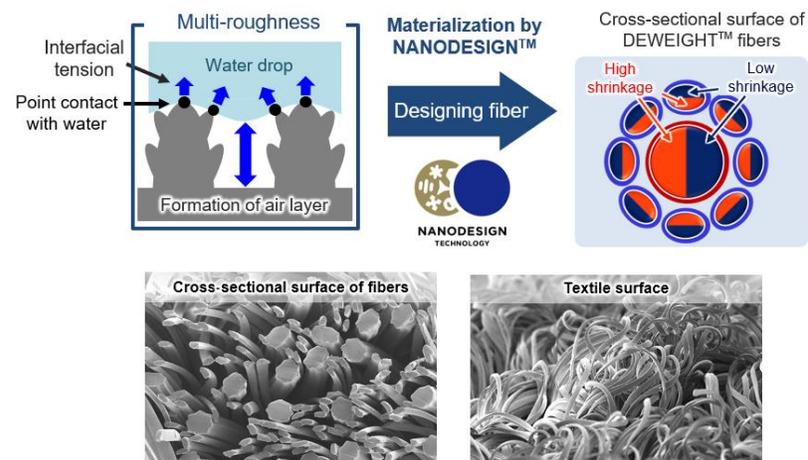
### High tensile modulus and enhanced strength TORAYCA™ M46X

Successfully developed TORAYCA™ M46X carbon fiber. This product is around 20% stronger than others in the TORAYCA™ MX series while maintaining a high tensile modulus. Developing applications mainly for fishing rods, bicycles, and golf shafts, Toray plans to launch this product within FY 2024.



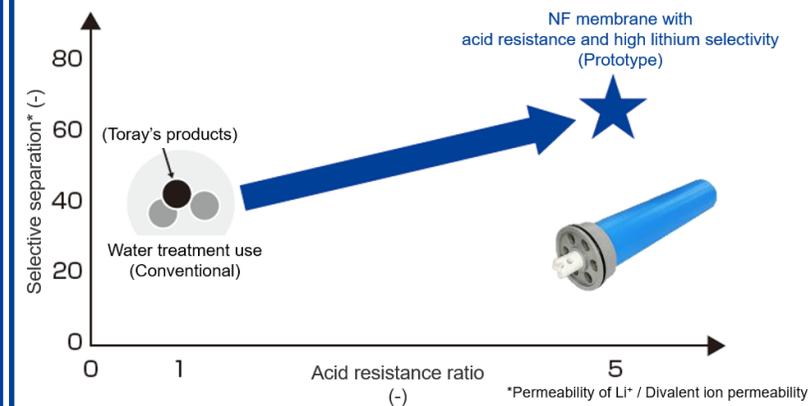
## PFAS-free water-repellent textile

- Developed DEWEIGHT™, a water-repellent stretch textile with comfort and an excellent waterdrop removal property, materializing it without per- and poly-fluoroalkyl substances (PFAS)
- The multi-roughness structure (unique uneven structure), which exists on the surface of high water-repellent natural materials such as lotus leaves and bird feathers, is formed on the surface of the textile, utilizing our unique conjugate spinning technology, NANODESIGN™
- Plan to promote applications of this textile from outerwear to bottomwear from Spring/Summer 2025



## Lithium recovery using separation membrane

- Developed a nanofiltration (NF) membrane to recover lithium from used automotive lithium-ion batteries that are expected to be generated in large quantities in the future and are currently largely disposed
- Around five-fold higher acid-resistance than conventional products, with 50% greater selective ion separation property
- Significant CO<sub>2</sub> emission reduction during the recovery process is expected, with the utilization of this membrane. The company will accelerate development of this product, targeting commercialization by FY 2027



# Sustainability Targets for FY 2025

Each relative ratio is calculated in comparison to FY 2013

	FY 2013 Actual (Baseline year) (J-GAAP)	FY 2022 Actual (IFRS)	FY 2023 Actual (IFRS)	FY 2025 Target (IFRS)
<b>Revenues from Sustainability Innovation Business<sup>*1</sup></b>	562.4 billion yen	1,282.8 billion yen (2.3-fold)	1,311.5 billion yen (2.3-fold)	1,600.0 billion yen (2.8-fold)
<b>CO<sub>2</sub> emissions avoided in value chain<sup>*2</sup></b>	38 million tons	9.5-fold	10.3-fold	15.0-fold
<b>Water filtration throughput contribution by Toray's water treatment membranes<sup>*3</sup></b>	27.23 million tons/day	2.5-fold	2.7-fold	2.9-fold
<b>Greenhouse gas emissions per unit of revenue in production activities<sup>*4 *6 *7</sup></b>	356 tons/100 million yen	33% reduction	36% reduction	40% reduction
<b>Greenhouse gas emissions of Toray Group in Japan<sup>*5 *6 *7</sup></b>	2.45 million tons	21% reduction	26% reduction	20% reduction
<b>Water usage per unit of revenue in production activities<sup>*7</sup></b>	14,693 tons/ 100 million yen	26% reduction	35%reduction	40% reduction

\*1. (1) Products that accelerate measures to counter climate change; (2) products that facilitate sustainable, recycling based use of resources and production; (3) products that help provide clean water and air and reduce environmental impact; and (4) products that help deliver better medical care and hygiene for people worldwide.

\*2. Toray calculates the CO<sub>2</sub> emissions reduced throughout the value chain of products in accordance with the chemical sector guidelines of the Japan Chemical Industry Association and the International Council of Chemical Associations (ICCA).

\*3. Water treated annually with Toray water treatment membranes. It is calculated by multiplying the amount of fresh water that the Toray membranes can produce per day, including reverse osmosis (RO), ultrafiltration (UF) and membrane separation bioreactors (MBR), by the number of membrane elements sold.

\*4. With the use of renewable energies and other zero emission power sources rising worldwide, the Toray Group aims to employ zero-emission power sources at a rate equivalent to or better than the targets in each country by fiscal 2030.

\*5. In Japan, Toray works to surpass the reduction target set for the industrial sector by the Japanese government (absolute emissions reduced by 38%) in its comprehensive plan (Cabinet decision on October 22, 2021) based on Japan's Act on Promotion of Global Warming Countermeasures.

\*6. The calculation method has been changed to multiplying the degree of financial control Toray Industries has over the individual subsidiary, in accordance with the GHG protocol, the international standard.

\*7. Calculation includes data for companies that joined the Toray Group in FY 2014 or later.

# External Evaluations from the Perspectives of ESG

## ■ CDP

February 2024

Water Security: A-  
Climate Change: B

## ■ S&P Global Sustainability Yearbook Member

February 2024 Toray Industries, Inc.  
Chemicals

**Sustainability  
Yearbook Member**

S&P Global Corporate Sustainability  
Assessment (CSA) Score 2023

S&P Global CSA Score 2023: 63/100  
Score date: February 7, 2024  
The S&P Global Corporate Sustainability Assessment (CSA) Score is the S&P  
Global ESG Score without the inclusion of any modelling approaches.  
Position and scores are industry specific and reflect exclusion screening criteria.  
Learn more at <https://www.spglobal.com/esg/isa/yearbook/methodology/>

S&P Global Sustainable1

## ■ MSCI

May 2023

**MSCI**  
ESG RATINGS



CCC B BB BBB A AA **AAA**

## ■ Selected as a component of major overseas indexes

Member of  
**Dow Jones  
Sustainability Indices**

Powered by the S&P Global CSA

**December 2023**

**Dow Jones Sustainability Index (DJSI),  
Asia Pacific**



**September 2023  
MSCI ESG Leaders Indexes**



**FTSE4Good  
June 2023  
FTSE4Good Index Series**

## ■ Selected for indices used by GPIF



**FTSE Blossom  
Japan Index**



**FTSE Blossom  
Japan Sector  
Relative Index**



**2023 CONSTITUENT MSCI JAPAN  
ESG SELECT LEADERS INDEX**

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The material in this presentation is not a guarantee of the Company's future business performance.

**'TORAY'**

**Innovation by Chemistry**