Toray Group established its Long-Term Corporate vision, TORAY VISION 2030, as a milestone for realizing the four perspectives of the world envisioned for 2050 as clarified in the Toray Group Sustainability Vision. Moreover, in March 2023, it announced the Medium-Term Management Program, Project AP-G 2025, which defines the issues to be addressed over the three-year period from FY 2023 to FY 2025. Since then, the Group has been moving forward with these efforts.

Toray Group Sustainability Vision

Toray Group Sustainability Vision formulated in 2018 clarifies the four perspectives of the world in 2050 that Toray Group aims to achieve, as well as the initiatives that must be taken in order to realize them. More spe cifically, Toray Group's mission is to provide the necessary solutions to the challenges facing the world in terms of both development and sustainability, including the issues of an ever-increasing global population, aging populations, climate change, water shortages, and resource depletion, through its innovative technol ogies and advanced materials. This means that the Group must not only ensure that its growth does not have a negative impact on global sustainability, but must also work closely with its business partners worldwide the goals of the Paris Agreement and the United Nations Sustainable Development Goals (SDGs).

The World as Envisioned in 2050 and Toray Group Initiatives



Long-Term Corporate Vision, TORAY VISION 2030

The Toray Group's long-term strategies aim to achieve the numerical targets for FY 2030 as the milestones for realizing the Toray Group Sustainability Vision. The coming business climate, however, is expected to see significant changes in population distribution, environmental issues, technological innovation, and other areas, where developments in the

Toray Group Sustainability Vision: FY 2030 Targets (All comparisons are with FY 2013)						
		FY 2013 Actual (Baseline) (J-GAAP)	FY 2023 Actual (IFRS)	FY 2025 Target (IFRS)	FY 2030 Target (IFRS)	
Supply of Sustainability I	nnovation products ^{*1}	562.4 billion yen	1,311.5 billion yen (2.3-fold)	1,600.0 billion yen (2.8-fold)	4.5-fold	
CO2 emissions avoided in	40 million tons	10.3-fold	15.0-fold	25.0-fold		
Water filtration throughpt membranes ^{*3}	ut contribution by Toray's water treatment	27.23 million tons/day	2.7-fold	2.9-fold	3.5-fold	
Greenhouse gas Per unit of revenue across the Toray Group*4*6*7		356 tons/100 million yen	36% reduction	40% reduction	50% or more reduction	
emissions in production activities	Greenhouse gas emissions of Toray Group in Japan*5*6*7	2.45 million tons	26% reduction	20% reduction	40% or more reduction	
Water usage in production activities	Per unit of revenue across the Toray Group*7	14,693 tons/ 100 million yen	35% reduction	40% reduction	50% or more 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 CO2 emissions reduced throughout the value chain of products in accordance with the chemical sector quidelines of the Japan Chemical Industry Association, the International Council of Chemical Associations (ICCA), and the World Business Council for Sustainable Development (WBCSD). *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 sion 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 FY 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%). This reduction target was included in the 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 con-trol Toray has over the individual subsidiary, in accordance with the GHG protocol, the international standard. *7 Calculations include data for companies that joined the Toray Group in FY 2014 or later.

Medium-Term Management Program, Project AP-G 2025

Under the Medium-Term Management Program, AP-G 2025, covering the three-year period from FY 2023 to FY 2025, Toray has raised five basic strategies, namely sustainable growth, ultimate value creation, product and operational excellence, enhancement of people-centric management, and risk management and governance. In addition, the Company will work to expand its growth fields of Sustainability Innovation (SI) Business and Digital Innovation (DI) Business, while pursuing business advancement and high-added-value creation as well as enhancing quality strength and cost competitiveness. Furthermore, in order to create a new growth trajectory, it will expand high-growth, high-profitability businesses while implementing structural reforms in lowgrowth, low-profitability businesses.

Although the U.S. economy showed strength, the global

Five Basic Strategies of Project AP-G 2025				
		Sustainable growth	Focusing management resources on Sustainability Innovation Business and Digital Innovation Business	
Seizing Profit Opportunities	2	Ultimate value creation	Maximizing profitability by making the most of tan- gible and intangible assets, and by collaborating with external partners	
	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 Managemen	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 develop- ment, and improving job satisfaction	
Foundation	5	Risk management and governance	Ensuring sound organizational management by enhancing internal controls and improving man- agement capabilities	

industrial structure and social systems will create business opportunities alongside the risk of contraction in existing businesses. The Toray Group therefore aims to accurately ascertain changes in industrial trends and to achieve sound, sustainable growth while pursuing business model transformation.

economic recovery during FY 2023 lacked momentum due to sluggishness in Europe and a slowdown in China. While the Japanese economy has gradually recovered, uncertainties over the outlook of the global economy and prolonged adjustment in the semiconductor market have exerted downward pressure. Against this backdrop, consolidated revenue decreased 1.0% compared with the previous fiscal year, to ¥2,464.6 billion, whereas core operating income increased 6.9%, to ¥102.6 billion and the core operating profit margin improved 0.3 points as a result of higher capacity utilization rates in the performance chemicals business and carbon fiber composite materials business, which captured the recovery in automobile and aircraft demand, and as a result of progress in structural reform and strategic pricing.

Project AP-G 2025: Financial Target for FY 2025							
	FY 2023 Actual	FY 2024 Forecast	AP-G 2025 FY 2025 Target				
Revenue	2,464.6 billion yen	2,590.0 billion yen	2,800.0 billion yen				
Core Operating Income	102.6 billion yen	145.0 billion yen	180.0 billion yen				
Core Operating Income Margin	4.2%	5.6%	6%				
ROIC*	2.8%	about 4%	about 5%				
ROE	1.3%	about 5%	about 8%				
Free Cash Flow	64.7 billion yen	_	Positive (3-year total)				
D/E Ratio	0.55	about 0.6	0.7 or lower (guideline)				

*Core Operating Income after Tax / Average Invested Capital (average of the balances at beginning and end of the period

Toray Group's Vision

Five Basic Strategies of AP-G 2025

Basic Strategy 1

Sustainable Growth

Based on the Toray Group Sustainability Vision, the strategy of sustainable growth positions the Sustainability Innovation (SI) business and Digital Innovation (DI) business as growth areas in which Toray can leverage its strengths with an outlook for greater profits. Here, the Company aims to expand revenue from these areas to account for around 60% of total revenue by FY 2025.



The SI business saw revenue for FY 2023 increase 2.2% compared with the previous fiscal year, to ¥1,311.5 billion owing to strength in carbon fibers for aircraft and the water treatment business. Similarly, the DI business saw revenue increase 9.0% compared with the previous fiscal year, to ¥181.3 billion owing primarily to growth in FPD-related manufacturing equipment and OLED electronic coating material sales.

In the SI business, Toray benefited from the start of construction on a large-scale power-to-gas (P2G) system that produces hydrogen via water electrolysis using power sourced from renewable energy. This business also received a reverse osmosis (RO) membrane order for the Yanbu 4 seawater desalination plant in the Kingdom of Saudi Arabia, and launched sales of Toray APOA2-iTQ, an in vitro diagnostic test kit that assists in the diagnosis of pancreatic cancer.





In the DI business, Toray increased production capacity for photosensitive and non-photosensitive polyimide against the backdrop of expanding adoption of OLED displays in smartphones and televisions, and of growing demand for power semiconductors coinciding with more sophisticated automobiles. In addition, the Company is also focused on expanding its product lineup to satisfy the need to address environmental issues, including the introduction of polyimide that does not contain N-Methyl-2-pyrrolidone (NMP).



Basic Strategy 2 Ultimate Value Creation

Under the strategy of ultimate value creation, Toray is advancing strategic pricing initiatives that offer an accurate understanding of Toray's product excellence and added value, and that ensure appropriate consideration commensurate with value. Specifically, in order to improve workplace competency on pricing, the Company is providing data analysis training for sales and marketing personnel, as well as strengthening workplace education by sharing best practices from Toray and other companies, and by providing knowledge via outside specialists. Moreover, as an approach to establishing data infrastructure to help implement strategic pricing, the Company created a tool to visualize pricing variation for the same products among different business departments, thereby enabling rapid action to be taken for problematic transactions. In addition, the Company is building a system that takes an interconnected, Group-wide approach to managing and following up on the initiatives that had been advanced individually by each marketing and sales department in the past.

Toray is also focused on innovations in the value chain, and is working to go beyond simply providing materials in a way that also enhances and extends the value chain through advanced processing, resource circulation, and DX services. For example, this will include expanding the asset-light, integrated supply chain of the fibers and textiles business into ASEAN and India as a high-added-value business. As another example, the Company will provide realtime monitoring systems as a subscription service in the water treatment business, and now offers an Al-based material concierge service in the resin business.

In addition, as part of the Future TORAY-2020s Project (FT Project), which aims to create and expand new businesses, Toray is engaged in the themes of hydrogen and fuel cell-related materials, biomass-based products and process technologies, environmentally-friendly printing solutions, next-generation medical care, and next-generation solutions in a way that breaks down the commercialization stage for each theme into the three phases of business expansion, business development, and long-term development.

Improve Workplace Competency on Pricing

Improve organizational capacity and awareness for implementing value-based pricing

Training on pricing-related data analysis	Workplace pricing education				
Examples of Training Themes on Data Analysis • Calculating fair prices for PET film	 Share best practices internally and externally Knowledge shared by outside specialists Establish innovation cycle that leads to high-added-value solutions 				
Verifying resin material pricing models Building prepreg pricing analysis model					
Recognize what is considered value to customers					

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

Basic Strategy 3

Product and Operational Excellence

By sharing and horizontally deploying cross-organizational cost reduction activity examples globally, under the strategy of product and operational excellence, Toray aims to reduce costs through self-driven efforts amounting to a total of ¥200 billion over the three-year period. Cost reductions for FY 2023 amounted to ¥71.1 billion, with a progress rate of 36%. Moreover, the Company is enhancing its purchasing function as one of its key management measures. Specifically, it is working to consolidate the purchasing activities individually conducted by each business site and in each region under the Purchasing & Logistics Division as the headquarters in an effort to reduce variable costs.

Similarly, the Company is strengthening internal collaboration at the head office, and is using its engineering technology to develop products made from diversified raw material sources, which are deployed throughout the Group to accelerate variable cost reductions on a global basis.



Basic Strategy 4

Enhancement of People-Centric Management

With a focus on Inclusion of Diverse Human Resources and Values, Creating Human Resources and Organizations that Adapt to Change, and Empathy with Toray Philosophy and Career Development with Rewarding and Engaging Work(engagement), as part of the strategy of enhancement of people-centric management, the Company is formulating human resource strategies and advancing related initiatives to maximize Toray's corporate value and to enhance employee well-being. In terms of engagement, in FY 2023 the Company began using the EX Score[™], which measures both expectations and actual impressions, in addition to satisfaction, for the employee survey, and switched from conducting the survey once every other year to every year. Moreover, the Company updated the in-house recruitment system from its previous standing as an annual program to a year-round program in FY 2024.

*EX Score™ is an indicator of organizational health, and measures the expectations and actual impressions of individuals, and the gap between these. This is a registered trademark of HRBrain, Inc., the survey provider.

Basic Strategy 5

Risk Management and Governance

In preparation for rapidly emerging risks and to quickly take action when a crisis occurs, the Toray Group established an organization dedicated to promoting risk management within the Corporate Strategic Planning Division, through which the Board of Directors and top management communicate closely. Moreover, the Group has established a management audit function for Group companies outside Japan through cooperation between the functional axis and regional axis, and is building global data infrastructure in an effort to promote the advancement and greater efficiency of global management.

Management Briefing Held on May 27, 2024

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 the Medium-Term Management Program, AP-G 2025, we have decided management challenges and key management measures to further improve workplace competency, which is Toray's strength, and the effectiveness of our strategies. Now we are proactively working on them. During the Management Briefing, the specific initiatives that are being promoted as part of Group management and the potential for growth among the Company's businesses were outlined.

Management Challenges and Key Management Measures

I have identified three existing issues that we face as we progress with AP-G 2025. The first of these is securing the resources for sound, sustainable growth and business expansion. In short, our challenge here is to generate cash by improving current profitability, and to allocate management resources to priority strategic businesses, as a means of enhancing the Company's ability to generate cash through long-term capital investments and research outcomes. The second issue is transcending organizational barriers and acting with a sense of speed amid a business climate that is undergoing significant changes around the world. Finally, the third issue is the need to position product and operational excellence as a pillar of the business

strategies if we are to come out on top within competitive environments for many of our businesses that are clearly growing ever more intense. Therefore, we established key management measures that interlink each business under each of the five basic strategies in AP-G 2025 along shortterm, medium-term, and long-term time frames, and have set out to apply these to specific issues to enhance the effectiveness of these strategies.

Seven Key Management Measures and 18 Issues

In order to enhance the effectiveness of the five basic strategies under AP-G 2025, I prioritized these in light of the business climate, and organized them into seven key management measures and 18 related issues. I then assigned a Vice President to take charge of each issue.



Under enhancement of business competitiveness and business expansion as the first measure, I included the three issues of advancement of businesses, business strategies based on competitiveness, and geopolitical risks. In this case, I placed myself in charge of leading efforts to handle the issue of advancement of businesses, in particular. As the second measure, we will enhance profitability and growth potential by engaging in optimal allocation of forces and invested capital in line with changes in the market.

As part of the third measure, creation of innovation, we will produce revolutionary new materials and technologies that elevate ideas from 0 to 1 in multiple fields. Yet I believe we must also focus more on leveraging the collective strengths of the Toray Group to further raise these ideas from 1 to 10 and 100 beyond. We must therefore turn our gaze more broadly to material and technological innovation, identify the needs that our customers have yet to recognize, and emerge as a true partner that can act with a sense of speed. Moreover, we will fully consider the combinations of technologies enabled by our collective strengths from every angle, including the processes of our customers, how Toray products are used, and cost competitiveness, to determine if they can set us apart from our competitors or whether they can offer value to our customers. We will involve the related departments from the earliest stages of research, in order to develop business models early on and more rapidly reach the commercial level. In addition, we will ensure product development is fully linked to strategic pricing because launching products of value to the market offers little meaning if they do not receive appropriate consideration.

Under the fourth measure of function-centric enhance-





ment, we will put strategic pricing and supply chain management into practice within the basic strategy of ultimate value creation. Following this, as part of the fifth measure of enhancement of cost competitiveness, we will implement total cost reduction projects together with enhancing the purchasing function along the functional axis. Moreover, we will establish a headquarters in each region where organizations have fully grown, and will also pay close attention to strengthening governance and risk management in these areas.

As part of human capital management, the sixth measure, we will promote initiatives under the primary themes of engagement, human resources portfolio, and Diversity & Inclusion. In terms of the seventh measure, dialogue with capital market, I believe it is critical for us to do a better job of communicating our progress on handling issues and KPI with an awareness of the stock price as an indicator of corporate value.

Toray Group's Vision

Initiatives to Enhance ROIC

Enhancing Asset Efficiency Using ROIC as a KPI Under AP-G 2025, Toray seeks to enhance ROIC through the two approaches of increasing core operating income and efficiently managing invested capital. Likewise, it has

set a core operating income of ¥180 billion (¥96.0 billion in FY 2022) and an ROIC of around 5% (2.7% in FY 2022) for FY 2025 as KPI.



Reforming the Business Portfolio Toward ROIC Improvement

2. For specific businesses and companies with large capital invest-

Specified Businesses and Companies "Darwin Project" which sets and executes short-term profit improvement measures as

well as medium- and long-term tasks such as restructuring of

Examples of businesses

Reallocating Management Resources from the

Toray has categorized its businesses into four guadrants

along the two axis of growth potential and profitability

based on scenarios for each business field. The goal here

is to reform the business portfolio toward improved ROIC.

Following this, the Company established a policy for real-

locating management resources from the perspective of

competitiveness as a third axis. As far as those business

fields that fall into the low-profitability category (those in

• U.S. and Europe film businesses

Large tow carbon fiber

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 Project to Improve

- Profits of Specified Businesses and Companies
- Business advancement through business strategies that match "business characteristics" and "competitiveness"



the quadrants III and IV) are concerned, the Company goes beyond the existing approach of business structure reform. Specifically, it established and is promoting the Darwin Project for businesses and companies identified as having large invested capital. In particular, the Company will consider downsizing assets that do not contribute to profit among low-growth and low-profitability businesses.

Meanwhile, the Company will prioritize allocations of capital and human resources to competitive growth businesses in those business fields with an outlook for

profitability (those in guadrants I and II). For example, in the carbon fiber business, which has displayed high growth potential yet requires large initial investments, the Company will aggressively allocate management resources while working to improve profitability. In contrast, for stable businesses that do not necessarily have high growth potential, like the integrated fiber, textile, and garment business, the Company will aggressively work to advance and extend the supply chain and expand business while maintaining high profitability through an asset-light operation.

Darwin Project

The project to improve profits of the seven specified businesses and companies that experienced significant declines in profitability due to major changes in the business climate since the formulation of AP-G 2025, is called the Darwin Project. As part of this project, the Company identified issues for these targets based on an understanding and analysis of their current situations, and is in the process of implementing separate measures for short-term and medium- to long-term issues. As can be seen from the basis of the project name, the Company will adapt to changes and proceed with restoring profitability through the project led by the President.

The Project to Improve Profits of Specified Businesses and Companies (Darwin Project)						
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						
Thorough understanding and analysis of current situation						
Identification of challenges (short-term issues, medium- to long-term issues)						
▼						
Short-term issues						
Quick return to profitability by reducing costs, etc.						
Medium- to long-term issues						
Setting and executing tasks such as business advancement and restructuring of production capacity						

*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)

Business Expansion in Growth Fields

Growth Potential and Profitability by Business Field

When comparing revenue growth rates and ROIC over the past 10 years by segment, the growth rate for the fibers and textiles segment reached the upper 2% level, whereas ROIC trended stably at a relatively high level of 6%. One feature of the Toray business portfolio is its structure in which large segments with revenue scales approaching ¥1 trillion ensure stable earnings, thereby supporting aggressive investments in other segments.

and companies.

production capacity

PP spunbond ABS resins

drawal/ downsizing

Perspective of Competitiveness

As a growing business, the Performance Chemicals segment has been a target of investment, yet it is also being affected by semiconductor and display inventory adjustments at the present time, causing both its growth rate and ROIC to stagnate. However, the Company expects to see major improvements in its growth rate and ROIC as a result of rising utilization rates. Although the Carbon Fiber Composite Materials segment is expected to grow, overall, ROIC has trended at a lower level due to lower utilization compared with its high-value capital investments. Given the extremely high profitability for some applications, however, the Company foresees the potential to improve profitability through application-specific strategies in the future. Meanwhile, revenue and profit of the Environment & Engineering segment are expected to expand steadily, mainly due to RO membranes for water treatment. The Life Science segment is currently in the incubation stage, and is expected to secure profits over the medium- to long-term.

Toray's Business Fields and Growth Potential							
	FY 2013	– FY 2023		FY 2023 - FY 2	2025 (AP-G 2	2025)	
Segment	CAGR of Revenue	ROIC of FY 2023		CAGR of Revenue	ROIC Target of FY 2025		
Fibers & Textiles	+2.6%		1	+2.8%	7%	5	
Performance Chemicals	+2.2%	4% 2	3	+8.3%	8% 💿	78	
Carbon Fiber Composite Materials	+9.9%	2%	4	+12.9%	4%	9	
Environment & Engineering	+2.1%	8%		+7.1%	9%	10	
Life Science	-1.1%	-2%		+7.2%	3%	11	
Total	+3.0%	2.8%		+6.6%	About	5%	
Business fields that need imp (Short- to Medium-term)		(Medium- t	to Long				
 PP spunbond, polyester staple PET film 	liber	ber nonwo	oven fa	: Airbag textile abric, Integrate			
3 ABS resin (TPM)		fibers, tex 6 Resins: PP		o garments n (xEV)			
4 Large tow (Zoltek)				ase film, ultrath	in film for ca	pacitor	
				ormation mater d materials	ials: Semico	nductor	
				craft and hydrog			
		10 Water trea		:: Reverse osmo	osis (RO) men	nbrane	
		Thumbee	utioui				
Toray's High-Growth	, High-Pr	ofitabili	ty B	usinesse	es (imag	ge*)	
Growth							
potential Hydrogen							
Commercialization							
Carbon Fiber Composite Materials							
Optimize producti	Expand fac		by appl	lication			
	ement different						
	211						
		h as Semi- or-related)		Wate			
		nal collaborat		Treatme	ent 🖵 🔪		
Barriers to entry for competitors Regional strategies Added-value creation							
Automoti	ve-Related						
	al collaboratior y for competito		rav'e	Unique Inte	urated		
	e costs		usine	ess from Fibe	er and		
Textiles to Garments Utilize existing allocations							
Expand sales regions							
Pricing strategies and steady cost reductions							
(promote across all businesses)							
Profitability (ROIC)							
*The size of the circles are images of the size of the current sales.							

Business Strategies for Growth Fields

This section describes the business strategies for the carbon fiber composite materials, fibers and textiles, and water treatment businesses, which are positioned as growth fields and therefore receive priority allocations of management resources.

Carbon Fiber Composite Materials Business Strategy

Basic Policy for Expansion

In FY 2023, this segment stagnated due to lower demand for the sports applications stemming from effects of the end of the special demand caused by COVID-19, a temporary decline in demand for wind turbine blades, and inventory adjustments for pressure vessels, etc. In contrast, the Company foresees the segment returning to double-digit growth as it heads toward FY 2025.

Meanwhile, FY 2024 saw continued recovery in demand for commercial aircraft, while demand for wind turbine blades also returned to a recovery track starting in the fourth guarter of FY 2023, leading to expectations for a further recovery starting in the second half of FY 2024. Adjustments related to industrial applications will also run their course within the fiscal year, while sports applications,

Business Environment						
Applications expected to expand in demand from 2026 onwards						
	arbon fiber demand sca 2030, compared to 20:		Carbon fiber demand scale around 2030	marke in 2040 co to 20	ompared	
Hydrogen tank	Next generation aircraft	Space (Rocket)				
4 -fold (90,000t)	1.3 -fold (92,000t)	10-fold (2,000t)	3,000 t	2.3 (1 trillion		
Demand forecast by application						
	Other industries					
250	Wind turbine bla	de				
	Pressure Vessel			CA	GR	
200	Sports			(2023	-2025)	
	Aerospace			404	470/	
150				161	17%	
12	8	117	132		16%	

50 8% 0 2% (CY)2022 2023 2024 2025

(Forecast) orecast)

*Based on the Morgan Stanley's Projection

https://www.morganstanley.com/ideas/investing-in-space

Applications and Product Strategies

As for the applications and product strategies for carbon fiber composite materials, the Company will expand profits by leveraging its strengths, namely its ability to develop products for aircraft, the pillar of profit in this segment, by combining high-strength carbon fiber with thermoset and thermoplastic prepreg, and its integrated development capabilities from carbon fiber to prepreg and composites. For the industrial applications, significant growth is expected, mainly in the pressure vessels. Under the

which have continued to lag, are also expected to recover starting in the second half of FY 2024. In 2026 and beyond, in addition to hydrogen tanks and wind turbine blades for offshore wind power generation, demand is also expected to emerge in new fields such as UAM (urban air mobility), next-generation aircraft, and space-related. Given these prospects, the Company will increase production capacity at global production bases under the basic policy of contributing to the realization of a carbon neutral society. The Toray Group currently possesses a combined production capacity of 64,000 tons for regular-tow and large-tow carbon fiber, and continues to boast the largest share of the global market. Moreover, it plans to commission expanded production facilities in the U.S., South Korea, and France during the second half of FY 2025.

Basic Policies

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

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



assumption of intensifying competition from China and South Korea, however, the Company will secure profits by developing differentiated products and via cost reductions. Another strategy is the large tow carbon fiber produced by Zoltek. In response to the temporary contraction in demand for wind turbine blade applications in FY 2023, the Company sought to improve profitability through the Darwin Project, and therefore expects to see a rebound in profits as demand recovers.

Aircraft applications Expand business by combining high-strength carbon fiber and prepreg						
(1) Short-term:(2) Medium-term:(3) Long-term:	Ensure to capture recovering demand for commercial aircraft Develop and expand for the UAM and space applications Promote development for next-generation aircraft	Solution Development Capacity	Diverse composite materials technologies Regular tow Thermoset			
	Industrial	applications				
	Expand applications by develop		roducts of carbon fiber			
 (1) Expand business for the 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 		Quality Reliability	 Establish Toray as global de facto standard Optimal solutions based on years of accumulated data Develop differentiated products 			
		Cost Reduction	• Develop innovative processes and utilize DX			
Strategies for large-tow carbon fiber						
Quick restoring profitability and restructuring through the Darwin Project						
	d for wind turbine blade applications, with ery from 2025 onward	Supply Stability	Ensure stable supply to U.S. and European customers			
ness of plant in (3) Reduce costs at	(2) Expand global operations by leveraging cost competitiveness of plant in Mexico(3) Reduce costs at plant in Hungary		Develop high-strength, high-grade products			
(4) Develop high-quality grade for offshore wind power generation and long turbine blades(5) Develop new applications other than wind turbine blade, and		Cost Reduction	 Reduce variable costs through strategic purchasing and improving utility intensity 			

- (1)
- (2
- (3

- (1)
- (2
- (4)
- collaboration among prepreg manufacturers based in Europe

Regional Strategies

Carbon fiber composite materials are closely tied to the particular economic security and energy policies of each region and country, as well as to the purchasing strategies of major customers. Amid the increasing demand to shift production to regions of consumption, the Toray Group already possesses production bases in Europe, Americas including Mexico, as well as Asian countries including

Europe

(1) Expand high-added-value products for commercial aircrafts, centrifuge for energy production, satellites and high-end automobiles (2) Expand pressure vessel applications (CNG and CHG) (3) Improve efficiency through collaboration among intermediate materia manufacturers, and expansion of market share



Reduce fixed costs through production innovation

China, South Korea, and Japan. Through global operations that leverage the cost competitiveness enabled by production in regions of consumption, large tow carbon fiber from Mexico, and prepreg from China, the Company will balance out excess and insufficient production capacity between regions to efficiently operate equipment and maximize profits.

Water Treatment Business Strategies

Achieving the Top Global Market Share by 2025

In addition to driving expansion in seawater desalination, the water treatment business is promoting the development of wastewater reuse, ultrapure water for semiconductor manufacturing processes, and other new applications that utilize the characteristics and functions of membranes. As a result, the Company aims to achieve the highest share of the global market for reverse osmosis (RO) membranes in 2025.

The Toray Group has established the de facto standard for RO membranes for the seawater desalination applications, and has captured the highest share of the market. In particular, amid the ongoing construction of large-scale seawater desalination plants in the Middle East, Toray is working to establish a stable supply system, to become the accepted provider of specifications for replacement demand through technical service enhancements, to increasingly shift to localization, and to thoroughly reduce costs. In this way, the Group will solidify its de facto standard position. In regard to wastewater reuse, the Company will capture demand from this market, which is expected to grow 10% annually, by proposing solutions based on the strengths of its wide range of technologies, including microbial technology, and its extensive product lineup. Moreover, amid intensifying efforts to attract and build semiconductor plants in countries around the world, the Company is developing and introducing energy-saving products that significantly enhance the ability to remove silica and other substances from water that cause lower yields in the semiconductor fabrication cleaning process. Similarly, it will accelerate global deployment through ultrapure water production applications for semiconductors.

Maintaining De Facto Standard	Growth Business Field	Growth Business Field
Seawater Desalination	Wastewater Reuse	Ultrapure Water for Semiconductors
 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 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 	 Changing wastewater into new water resources with the integrated membrane system (IMS: UF membranes, +RO membranes). Basic Strategies Oreate added value and strengthen profitability by providing total membrane solutions leveraging strengths as full line-up membrane manufacture Accelerate global business expansion through focused allocation of resources Diani Issues Developing ney products for reusing wastewater Accoumulating IMS knowhow and advocating tech support Responding to regionally dispersed demand Strengthening ability to disseminate info through dedicated website 	 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 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
Fibers & Textiles Business Strate	gy	

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

The strength of Toray's fibers and textiles business is a high profitability business structure consisting of an asset-light, integrated supply chain that strategically uses OEMs against the backdrop of the Company's technologies and development capabilities. To date, the Company has expanded profits throughout the supply chain by providing optimal solutions at each stage, from filaments and staple fibers to textiles and garments, in line with customer needs. Although the Company has already established a supply chain in Japan and China, it will extend this supply chain into ASEAN and India to expand this segment as a high-added-value business. Specifically, the Company is establishing a production base for knit fabrics in Vietnam and a production base for textiles in Thailand. Similarly, in India, the Company will expand profits by applying an assetlight strategy through alliances with leading partners. For the industrial applications which mainly focus on the automobile and environmental fields, the Company is working to improve profitability by providing Toray's advanced materials and enhancing initiatives that interlink the value chains.



Strengthening the Management Foundation

Maintaining Financial Soundness and Capital Allocation

As for capital allocation, along with assuming an operating cash inflow of ¥760 billion over the three-year period from FY 2023 to FY 2025, investment cash outflow is expected to reach a total of ¥720 billion, consisting of capital investments valued at ¥500 billion (¥355.2 billion in AP-G 2022, the previous Medium-Term Management Program) and R&D expenditures at ¥220 billion (¥193.8 billion in AP-G 2022). This capital allocation aims to achieve a positive free cash flow, thereby stabilizing and increasing shareholder returns.





Reduction of Cross-Shareholdings and Allocation to Share Buybacks

In order to accelerate capital efficiency improvements, in May 2024, the Company announced its policy to reduce cross-shareholdings by 50%, or approximately ¥100 billion, over the three-year period from FY 2024 to FY 2026, and to allocate all proceeds from these sales to share buybacks as a form of shareholder return.

Moreover, in November 2024, the Board of Directors resolved to execute share buybacks up to ¥100 billion, given the clear outlook for ¥100 billion in sales of cross-shareholdings for FY 2024. This move will achieve the aforementioned cross-shareholdings reduction target two years ahead of schedule, and is expected to reduce

Having set the dividend payout ratio to 30% or more, the Company aims to increase the dividend amount through profit growth based on a policy of maintaining stable and continuous dividends. Furthermore, the Group revised the D/E ratio guideline downward from around 0.8 to 0.7 or lower to support sound, sustainable growth based on a strong financial foundation.

In FY 2024, Toray assumes capital investments of ¥240 billion for the ultra-microfiber nonwoven fabric with a suede texture, polvester film, polvpropylene film, PPS resin, carbon fibers, and other products; depreciation and amortization of ¥130 billion; and R&D expenditures of ¥81 billion.



- D/E ratio (right axis)



the ratio of total equity accounted for by cross-shareholdings to approximately 5% by the end of FY 2024.