The Toray Group Mid- to Long-Term Strategy

In order to realize the four perspectives of the world envisioned in 2050 as clarified in the Toray Group Sustainability Vision, Toray Group, in May 2020, announced its Long-Term Corporate vision, TORAY VISION 2030 (VISION 2030) as a milestone, along with the Medium-Term Management program, Project AP-G 2022 (AP-G 2022), which defines issues to be addressed over the three-year period from fiscal 2020 to fiscal 2022.

Toray Group Sustainability Vision

Toray Group Sustainability Vision, formulated in July 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 specifically, Toray Group's mission is to provide through innovative technologies and advanced materials 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. 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 to help realize the co-creation of new value. As the basis for TORAY VISION 2030, Toray Group Sustainability Vision outlines the future direction of Toray Group and its contribution to addressing global issues, including the goals of the Paris Agreement and the United Nations Sustainable Development Goals (SDGs).

	Toray Group Initiatives		
		TALE STATE NO.	ALL THE R
materials	Accelerating measures to counter climate change	A net zero emissions world, where greenhouse gas emissions are completely offset by absorption	13 churt teanage 13 churt teanage t
Green Innovation (GR) Businesses	sustainable, recycling-based	A world where resources are sustainably managed	
Life Innovation	Providing clean water and air	natural environment, with	HE ON HATER
Life Innovation (Li) Businesses	Contributing to	A world where everyone enjoys good health and hygiene	3 GOO MAIN A RADIELERIE

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Long-Term Corporate Vision, TORAY VISION 2030

Toray Group aims to achieve sound, sustainable growth while promoting a business model transformation by accurately identifying changing industrial trends brought about by demographic factors, environmental issues, and technological innovation. With this in mind, Toray Group is promoting active investment to promote "global expansion in growth business fields." To make this possible, the Group is working to maximize the value it can create over the medium- to longterm by "strengthening competitiveness" through continuous business model innovations and total cost reductions, and by "strengthening the management foundation" to enable investment for growth based on enhanced capital investment efficiency and an improved financial structure.

Under TORAY VISION 2030, Toray Group is promoting Green Innovation (GR) and Life Innovation (LI) businesses growth across all of its segments while working to expand revenue and profit. In addition, we are actively engaged in the groupwide Future TORAY-2020s Project (FT Project). As part of this project, we are investing resources selectively in large-scale themes with the aim of achieving total revenue of around ¥1 trillion in the 2020s across all new businesses.

Long-term strategies to achieve "sound, sustainable growth"

Global expansion in growth business fields

- Promote GR businesses that help solve global environmental issues as well as resource and energy issues
- Promote LI businesses that contribute to better medical care and longevity, foster public health, and support personal safety

Strengthening competitiveness

- Create new value through business advancement and high added-value creation, thereby providing solutions with a materials-oriented approach to customers and society
- Pursue dramatic cost reductions by setting challenging targets as well as strive to reduce environmental impact

5 Strengthening the management foundation

- Improve cash flow and capital efficiency, and balance financial soundness and growth investment
- Conduct business structure reforms of low-growth and low-profitability businesses

FY 2030 Sustainability Targets	FY 2013 Actual (baseline year) (J-GAAP)	FY 2030Target (compared with FY 2013) (IFRS)
GR Net sales / Revenue	463.1 billion yen	4 fold
LI Net sales / Revenue	119.6 billion yen	6 fold
Avoided CO ₂ emissions	38.4 million tons	8 fold
Contributed annual water filtration throughput	27.23 million tons/day	3 fold
Greenhouse gas emissions per unit of sales in production activities	3.37 thousand tons/billion yen	30% reduction
Water consumption per unit of sales in production activities	152 thousand tons/billion yen	30% reduction

26

Progress Made with the Medium-Term Management Program

Medium-Term Management Program, Project AP-G 2022

Under the Medium-Term Management Program, Project AP-G 2022 (AP-G 2022), which covers the three-year period from fiscal 2020 to fiscal 2022, the three basic strategies "global expansion in growth business fields," "strengthening competitiveness," and "strengthening the management foundation" were adopted toward the realization of the sound and sustainable growth, as mentioned in the Long-Term Corporate Vision, TORAY VISION 2030. Specifically, Toray Group is working to expand Green Innovation (GR) business, which will contribute to solving global environmental, resource and energy issues, and Life Innovation (LI) business, which will contribute to better medical care, longevity, foster public health, and support personal safety. In addition, to ensure financial soundness, the Group is conducting business operations with even more consideration than before of the balance between profit, cash flow, and asset efficiency, while promoting the business structure reform of low-growth and low-profitability businesses.

Financial Targets				(Billion yen
	FY 2020 Actual	FY 2021 Actual	FY 2022 Forecast	FY 2022 Target
Revenue	1,883.6	2,228.5	2,600.0	2,600.0
Core Operating Income	903	132.1	130.0	180.0
Core Operating Margin	4.8%	5.9%	5.0%	7%
ROE	3.9%	6.4%	about 6%	about 9%
ROA	3.2%	4.5%	about 4%	about 7%
Free Cash Flow	113.7	81.1	Positive	120 billion yen or more (total of 3 years)
D/E Ratio	0.79	0.67	Management in accordance with the guideline (around 0.8)	around 0.8 (guideline)
Dividend Payout Ratio	31%	30%	30%	about 30%

Basic Strategy **[1]** Global Expansion in Growth Business Fields

Utilizing Toray Group's advanced materials and core technologies, under the strategy "global expansion in growth business fields" in AP-G 2022, Toray Group is working to drive GR and LI business expansion. Through the promotion of group-wide projects, we will contribute to solving global social issues by expanding our businesses.

Green Innovation (GR) Business Expansion

By expanding our Green Innovation (GR) business, we will contribute to solving global environmental issues and resource/energy problems. By allocating resources for

capital investment and R&D in a focused manner and for large-scale themes, the Group is targeting revenue in the GR business in fiscal 2022 of ¥1 trillion. The large-scale themes include lightweight materials, biomass-derived materials, recycled materials, separator films for lithium-ion secondary batteries, large tow carbon fibers for wind turbine blade applications, water treatment membranes, and hydrogen- and fuel cell-related materials.

In fiscal 2021, sales of carbon fibers for aircraft remained sluggish due to restrictions placed on movement by the COVID-19 pandemic. Nonetheless, driven by carbon fibers for wind turbine blades and water treatment membranes, GR business revenue increased 16.9% year on year, to ¥832.2 billion.

In the GR business, the water treatment business newly received a reverse osmosis (RO) membrane supply order for the Rabigh 3 Desalination Plant in the Kingdom of Saudi Arabia. This plant will be the largest using the RO membrane method in the country. As part of our resource recycling initiatives, we have launched EcodearTM N510, a nylon 510 fiber that incorporates 100% biobased synthetic polymer content. We have also launched an eco-friendly waterless printing plate for flexible packaging materials.

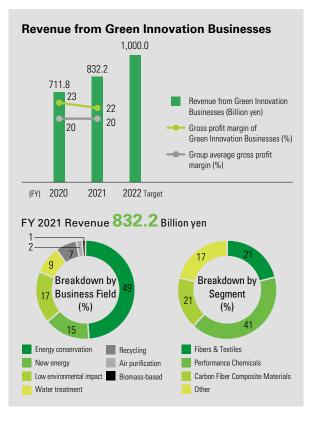
Furthermore, in the field of hydrogen, in which growth is expected in the years to come, a Toray-developed polymer electrolyte membrane (PEM) for water electrolysis was selected as a joint project by eight companies for the New Energy and Industrial Technology Development Organization (NEDO)'s Green Innovation Funding Program, and a strategic partnership concluded with Siemens Energy K.K. In collaboration with the Yamanashi Prefectural Government and Tokyo Electric Power Company Holdings, Inc., the Company has also established Japan's first Power to Gas (P2G) business company.

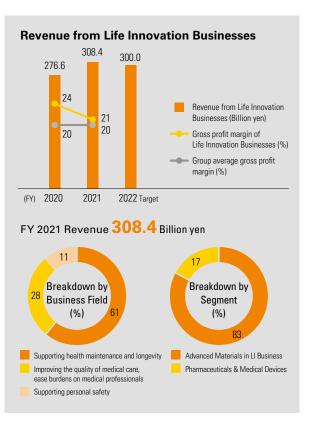
Life Innovation (LI) Business Expansion

By expanding the Life Innovation (LI) business we will contribute to better medical care and longevity as well as to the promotion of public health. The Group is targeting sales revenue of ¥300 billion in its LI business in fiscal 2022.

In fiscal 2021, LI business revenue increased by 11.6% year on year to ¥308.4 billion due to shipments of nonwoven fabrics for hygiene applications and sports-related materials remaining strong.

In the LI business, we have developed and launched sales of the FILTRYZER[™] HDF hemodiafiltration device, which uses a hollow fiber membrane made of polymethyl methacrylate (PMMA) and boasts excellent biocompatibility. We have also developed a multi-item allergy testing biochip that can diagnose multiple allergies to a high degree of high sensitivity and accuracy using trace amounts of blood. In addition, having confirmed the heat stress reduction effect of disposable, highly breathable personal protective clothing, we contributed to measures to prevent heatstroke and other conditions at manufacturing and construction sites.





Progress Made with the Medium-Term Management Program

New Business Creation

With regard to the Future TORAY-2020s Project (FT Project)—a group-wide project designed to accelerate the development of large-scale themes and the construction of business models for the next growth stage under AP-G 2022—in the GR field we are promoting themes that include hydrogen- and fuel cell-related materials, biomass utilization products and process technologies as well as environmentally-friendly printing solutions. We are also promoting the development of applications for a porous carbon fiber that can be used in the separation layers that support the structure of gas separation membranes to, for example, separate CO₂ and biogas as well as hydrogen. Having in the LI field created TRK-950, a therapeutic antibody drug for cancers, clinical trials for multiple cancer types are currently under way in Europe, the United States, and Japan. We have also filed applications with Japan's Ministry of Health, Labour and Welfare to obtain manufacturing and marketing approval for an in-vitro diagnostic reagent test that measures protein concentration changes in the blood of pancreatic cancer patients.

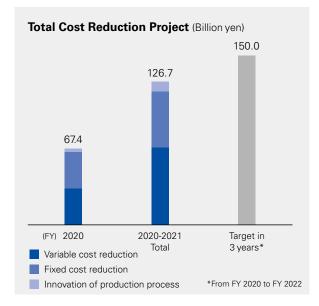
Basic Strategy 2 Strengthening Competitiveness

To strengthen competitiveness, the Group is working on three priority issues: total cost reduction; business advancement and high added-value creation; and enhancing workplace competency in sales & marketing and production.

For total cost reduction, Total Cost Reduction Project (NTC Project) is promoted across the Group, and the target is to reduce ¥150 billion over a three-year period through activities to reduce variable and fixed costs and bring about innovation in production processes (¥100 billion in variable costs, ¥35 billion in production fixed costs, and ¥15 billion in innovation of production processes). In fiscal 2021, the total amounted to ¥59.3 billion, and to ¥126.7 billion over the two years from fiscal 2020 (a progress rate of 84%). Breaking it down, over the two years we achieved reductions of ¥68.3 billion in variable costs, ¥49.4 billion in production fixed costs, and ¥8.9 billion in innovation of production processes.

As for business advancement and high added-value creation, the Group is working not only to achieve advancement in products but also to add high value by integrating and combining products and services, to create new value through alliances, and to pursue innovation in the value chain by utilizing Information and Communication Technology (ICT).

In terms of enhancing our workplace competency in sales & marketing, we are building a group-wide information-sharing system covering end-customer requests, market demands, and needs by product application, while devising ways to strengthen our ability to make comprehensive sales proposals and resolve problems. We are also utilizing digital tools as we work to improve operational efficiency and enhance the sophistication of our customer communications. To enhance our workplace competency in production, aside from continually improving labor productivity, we are focusing on preventing the occurrence of and improving our responsiveness to production problems, promoting the compilation of manuals, and extending our global supply chain.



Basic Strategy 3 Strengthening the Management Foundation

In strengthening the management foundation, two themes are promoted: strengthening the financial structure by improving cash efficiency; and the business structure reform of low-growth and low-profitability businesses.

With regard to strengthening the financial structure by improving cash efficiency, in aiming toward sound, sustainable growth we will be more strongly aware than ever of cash flow, which is the certainty of a return on investment, while focusing on optimizing inventory and shortening payback periods (cash conversion cycle, CCC). As a result, free cash flow in fiscal 2021 was positive at ¥81.1 billion, and the two-year cumulative total amounted to ¥194.8 billion. In addition, although we had set a D/E ratio of "around 0.8" as a guideline, despite the decrease in interest-bearing debt the D/E ratio was 0.67 due to an increase in owner's equity.

Concerning the business structure reform of lowgrowth and low-profitability businesses, we select those businesses and companies that have fallen below the standard values for both growth potential and profitability. After ascertaining the position and business environment of each business, and conducting numerical analyses, we discuss and implementing reforms to our business structure and organizational structure to divest ourselves of them. For example, in the fibers and textile business we are downsizing the polyester/cotton blended textile (T/C) business, consolidating the manufacturing bases in the Japanese fibers and textiles business, carrying out the development of the market for casual wear for the Japanesestyle clothing business, and outsourcing the Russell business (knit fabric used for shapewear, back support belt applications, etc.).

Initiatives for Sustainability

With regard to sustainability targets, revenue from the LI business is steadily increasing, and we have almost reached the target level for fiscal 2022. The GR business got off to a slow start due to the impact of the COVID-19 pandemic but recovered in fiscal 2021. The amount of avoided CO₂ emissions was 8.0 times that of fiscal 2013, achieving the target for fiscal 2030 far ahead of schedule.

The contributed annual water filtration throughput is also steadily increasing. Improvements in GHG emissions and water consumption per unit of revenue in Toray Group production activities also exceeded targets for fiscal 2022.

We will continue to focus on carbon neutralization and our contribution to a circular economy in the years to come.

Sustainability Targets	FY 2013 Actual (baseline year) (J-GAAP)	FY 2021 Actual (compared with FY 2013) (IFRS)	FY 2022 Target (compared with FY 2013) (IFRS)	FY 2030 Target (compared with FY 2013) (IFRS)
GR Net sales / Revenue	463.1 billion yen	832.2 billion yen (1.8 fold)	1,000.0 billion yen (2.2 fold)	4 fold
LI Net sales / Revenue	119.6 billion yen	308.4 billion yen (2.6 fold)	300.0 billion yen (2.5 fold)	6 fold
Avoided CO ₂ emissions	38.45 million tons	8.0 fold	5.3 fold	8 fold
Contributed Annual water filtration throughput	27.23 million tons/day	2.2 fold	2.4 fold	3 fold
Greenhouse gas emissions per unit of sales in production activities	3.37 thousand tons/billion yen	2.67 thousand tons/billion yen (21% reduction)	20% reduction	30% reduction
Water consumption per unit of sales in production activities	152 thousand tons/billion yen	109 thousand tons/billion yen (28% reduction)	25% reduction	30% reduction