



02

Value creation strategy

- 19 CFO message
- 21 2025 Medium-Term Management Plan
- 25 Innovation
- 29 Toward digital transformation

CFO message

We will respond with agility to business environment changes, and perform cash allocation to increase corporate value

Hiroshi Otsuki

Representative Director and Senior Managing Executive Officer, CFO, Controlling Supervisor of Management and Administration Division

The mission of the CFO is to perform accurate cash allocation while discerning market structure that is in flux

In the fiscal year ended March 31, 2023, drastically rising raw material and fuel prices impacted many of our businesses, while worsening market conditions also affected our core business of film, leading to a decline in near-term profits. As I see it, the worldwide rise in raw material and fuel prices is not temporary, and probably represents irreversible changes in cost structure. In addition, given that fixed costs of investment in human capital and GHG emissions reduction are expected to rise, we are again made aware that the conventional method of passing increased manufacturing costs through to sales prices will not be enough. We must set product prices that are appropriate to assumed increases in business cost as we also work to develop products with higher added value.

As CFO, the most important mission I have is that of executing cash allocation accurately to increase corporate value as we respond with agility to essential changes in the structure of the market. In our previous medium-term management plan, we set the target for our D/E ratio at lower than 1.0, and we achieved this guideline for financial soundness. Because to make progress with upfront investment toward future growth in our 2025 medium-term management plan (2025 MTP, FY2023 to FY2026), we need to exercise control to keep from disrupting the balance between cash flow generation capacity and interest-bearing debt. In addition to the D/E ratio, our policy is therefore to use the Net Debt/EBITDA ratio as a means of managing our financial condition stably.

Highlights of our financing activities in the fiscal year ended March 31, 2023 included completion of repayment of a subordinated loan procured immediately after the 2008 financial crisis. As a new source of capital procurement, we then issued sustainability-linked bonds, as a type of environmental bond. To improve our asset efficiency, we have also been reviewing the significance of our cross-shareholdings more intensively, and continued selling them during this fiscal year.

Improving profitability through reorganization of the business portfolio

We have identified the term of the 2025 MTP as a four-year period for “remaking and preparing” that will serve as a milestone on the way toward achieving the goals we have laid out in Sustainable Vision 2030. The crucial task will be thoroughgoing execution of reorganization of the business portfolio. Even among products that are generating a profit today, I would rather not pass products down to the younger generation which will diminish in value from a long-term perspective. It’s easier said than done, and will entail some extremely difficult decisions, but I feel strongly that we must find out whether we can gain the world’s recognition of the value of TOYOBO products, determine their intrinsic appeal, and accelerate the reorganization of our business portfolio.

As the 2025 MTP clearly states, in order to thoroughly implement this business portfolio reorganization, we have stratified



CFO message

each of our businesses with respect to two axes, profitability and growth potential, and we specify the hurdle rate for each one in terms of ROCE and CAGR. The Board of Directors performs a rigorous check of each business operation based on these factors, looking at how much capital the operation has and how it is positioned relative to its hurdle rate. It then deliberates actions that might be taken.

Of the three businesses that require improvement, textiles, airbag fabrics and contract manufacturing of pharmaceuticals, we are steadily moving ahead toward profitability under a plan that is in line with our profit improvement roadmap. Moreover, we will steadily execute growth strategies for the film and life science businesses, which we have positioned as businesses focusing on expansion, and will expand our environmental and functional materials business through TOYOBO MC Corporation, while ensuring that about 4% of our sales amount goes to R&D investments in preparation for the future.

In advancing the reorganization of the business portfolio described above, our intention for the 2025 MTP is to maintain an overall ROE of 7.0% and ROIC of 5.0%. The fact that our group's PBR is currently below 1.0 is something we take seriously. While working hard to boost our profitability (ROE and ROIC), we will also work on communicating our growth potential in a way that is even more readily understood. While continuing to advance management with an awareness of the cost of capital, we will

proactively communicate to all of our stakeholders the fact that we are a company that can aim for sustained robust growth into the future by providing high-value-added products that meet society's needs.

Ensuring consistency between management strategy and our human resource base, while aiming for transformation into a company with an interesting “something extra”

Under Sustainable Vision 2030, our group has defined several issues and business opportunities that we could not sufficiently respond to within the time frame of our previous medium-term management plans. Although we have formulated a series of action plans, we acknowledge that one major prerequisite to executing them is securing a human resource base. I have the sense that during the long period of our group's structural reform, our efforts to secure and train the necessary human resources have not necessarily been sufficient. In taking this reflection to heart, I believe we must ensure that our management strategy and human resource base are consistent with each other.

And yet, merely securing from somewhere else the human resources that we need to implement our current business operations will not be sufficient for us to fulfill our aspiration to be a group that discerns the changes happening in the world, creates appealing products, and develops together with our customers. Only people are capable of creating businesses of the future, unbound by the present. I am aware of a strong need to get back to this point of departure, and to transform everything from our personnel system to our organizational culture.

We recently performed a thorough review of our personnel evaluation system, and I think that creating a workplace environment that enables people to engage cheerfully and with liveliness will make the implementation of our business more interesting.

In looking back on the past of businesses that have driven our group's growth, we see many cases in which the technologies nurtured through persistent efforts of employees have borne fruit because the employees believed in the interesting future developments they were working toward, even if they could not produce profit immediately. I believe that by establishing an environment that ensures psychological safety conducive to

free expression of opinions while encouraging wholehearted acceptance of challenges, we can enable our employees' abilities to flourish, please our customers, and come closer to our group's vision of being a group that continues to create the solutions needed by people and the earth with materials and science.

The Toyobo group encourages everyone throughout the group to engage in “casual discussions on serious issues,” from management on down. Chatting with employees in various situations makes me aware of completely fresh perspectives and things happening in the world. I get a sharp sense of how those of us in management understand only a portion of what is happening in the world. I think we can make strong progress as a sustainable company by making this a company with an awareness of generational, gender and other forms of diversity which takes an interest in sharing different perspectives and values that have not existed in the past (i.e., “something extra”).

At the stage of forward-looking investment for growth. Working to link shareholder returns with business performance toward a target of 30% total return ratio

Returning profit to all of the shareholders is the most crucial matter for a company, and one of its most important cash allocation priorities. We are now at the stage in which we make forward-looking investments, and spend money boldly in areas of priority investment. Since investment will be particularly extensive during the period of the 2025 MTP, our cash allocation involves the use of external capital procurement while also distributing dividends. For the fiscal year ending March 31, 2024, we anticipate distribution of a ¥40 per share annual dividend. We will work on linking shareholder returns to business performance during the 2025 MTP period as we target a total return ratio of 30%. I would like to ask all of our shareholders for their long-term support for us, the Toyobo group, as we accelerate our harvest of the fruits of our investment, and steadily move forward toward the ideals we seek to realize.

Management and financial indicators referenced
 ROCE: Return on capital employed
 CAGR: Compound annual growth rate
 ROE: Return on equity
 ROIC: Return on invested capital
 PBR: Price to book value ratio



Transformation to sustainable growth: 2025 Medium-Term Management Plan

— The first stage of rebuilding and preparing toward achieving our ideal for 2030 —

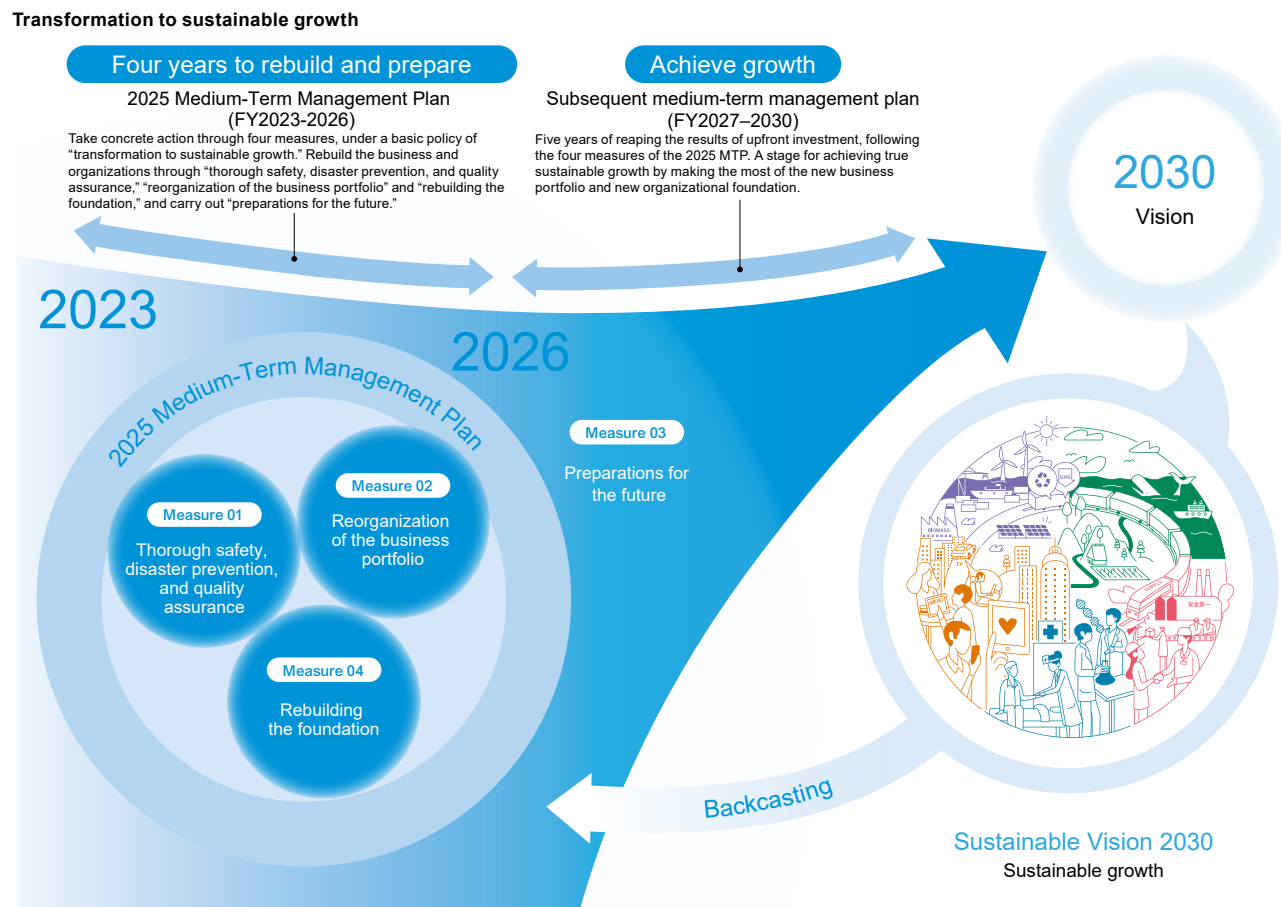
In May 2022, the Toyobo group broke away from our former survival mindset and announced Sustainable Vision 2030, with the aim of sustainable growth.

Toward the realization of this goal, we have formulated and launched the four-year 2025 Medium-Term Management Plan, which lays the foundation for growth.

Depicting sustained growth amid a discontinuous business environment undergoing massive changes

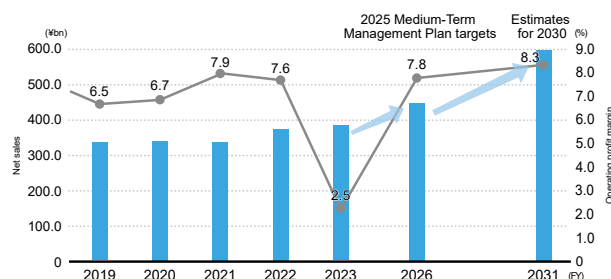
As we entered the 2020s, a pandemic, large-scale natural disasters, and major political changes have occurred, the impacts of which have brought discontinuous, dramatic change to the business environment for companies. New challenges are emerging in rapid succession, including the orientation toward decarbonization and circular economies, DX-driven acceleration of technological progress and social implementation, resource prices remaining high globally, disruption and blockage of supply chains, and alterations in people's awareness, values, and behavior, all of which require companies to attend to all stakeholders while increasing their corporate value.

In order to aim for future growth while confronting this epochal turning point, companies must speed up their own transformation. Our group aims to achieve sustainable growth through Sustainable Vision 2030, in which we set forth our ideal: We will continue to create the solutions needed by people and the earth with materials and science. We identified fiscal 2026 as a milestone on the way to our vision for 2030, initiating the 2025 Medium-Term Management Plan (2025 MTP) in fiscal 2023. We have identified the 2025 MTP as four years in which to rebuild and prepare for the transformation to sustainable growth, and have solidified our course toward reforming our businesses and making forward-looking investments in growth. Moreover, the subsequent medium-term management plan, starting from fiscal 2027, represents the next stage, in which we will achieve genuine growth by reaping the fruits of these efforts.



Transformation to sustainable growth: 2025 Medium-Term Management Plan

The 2025 Milestone —Medium-Term Management Plan Targets and vision concept for 2030—



2025 Medium-Term Management Plan financial targets

	FY2022 results	FY2023 results	2025 MTP targets	2030 vision concept
Sales (billions of yen)	375.7	399.9	450.0	600.0
Operating profit (billions of yen)	28.4	10.1	35.0	50.0
Operating profit margin (%)	7.6	2.5	7.8	8.3
EBITDA (billions of yen)	48.5	29.1	63.0	90.0
Net profit (billions of yen)	12.9	-0.7	15.0	23.0
ROE(%)	6.8	-	≥7.0	≥9.0
ROIC(%)*1	5.1	1.7	≥5.0	≥7.0
D/E ratio	0.98	1.21	<1.20	<1.00
Ratio of net debt to EBITDA (multiples)*2	3.4	5.8	<5.0	<4.0

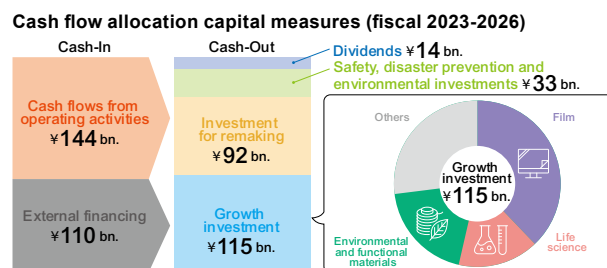
*1 NOPAT ÷ (interest-bearing liabilities + net assets)

*2 (interest-bearing liabilities - cash and deposits) [at fiscal year end] ÷ EBITDA

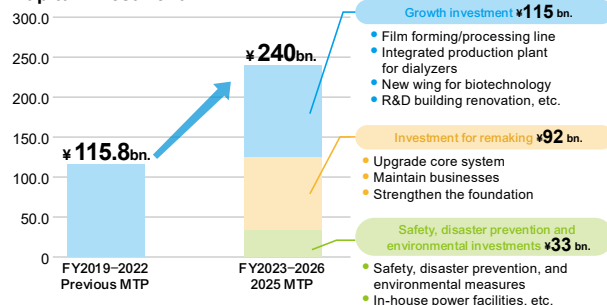
• Interim targets toward our vision: Sales of ¥450 billion, operating profit of ¥35 billion

Under our Sustainable Vision 2030 financial targets, we envision sales on the order of ¥600 billion, operating profit of ¥50 billion, and ROE of 9.0% or higher. Now almost at its mid-point, the 2025 MTP specifies financial targets for fiscal 2026, the final year of the plan, that include sales of ¥450 billion, operating profit of ¥35 billion, and ROE of 7.0% or higher.

Execute strategic investments for growth —Cash allocation—



Capital investment



• Three investment objectives: Safety, disaster prevention, and the environment; rebuilding; and growth

We will invest ¥240 billion, approximately doubling the amount of the previous medium-term management plan. With top priority on investments in safety and disaster prevention, as well as on addressing the environment, we will invest ¥115 billion of growth investments in the three businesses of film, life science, and environmental and functional materials. In fiscal 2023, we made our investments more or less according to plan. As sources of funding, we expect to use ¥144 billion (estimated) of operating cash flow, as well as externally procured funds of ¥110 billion, for which we have specified financial management indicators defining the limits within which we plan to raise these funds, including a D/E ratio of less than 1.2, and a net debt/EBITDA multiple of 4.

Building a foothold for growth and great strides forward —Four measures—

Measure 1	Thorough Safety, Disaster Prevention, and Quality	<ul style="list-style-type: none"> Implementation of “Zero Disaster,” our Master Plan for Safety and Disaster Prevention Rebuilding of our quality assurance management system Strengthening of our risk management system
Measure 2	Business Portfolio Realignment	<ul style="list-style-type: none"> Business stratification (return on capital employed and average annual growth rate) <ol style="list-style-type: none"> Expansion prioritization: Implement proposed growth measures and strengthen competitive advantages Stable profit: Explore growth or maintain improvements Necessary improvements: Execute the Master Plan toward achieving our proper state
Measure 3	Preparing for the Future	<ul style="list-style-type: none"> Creation of new businesses and technologies: Strengthen environmental and biotechnology DX strategies: Sales force automation (SFA), materials informatics (MI), smart plants, new ways of making money Roadmap to carbon neutrality (2050)
Measure 4	Rebuilding Our Foundation	<ul style="list-style-type: none"> Development of human resources and promote diversity Workplace manufacturing capabilities Establishment of business infrastructure Governance and compliance Organizational culture reform

• Reforms based on key concepts: Social problem-solving, sustainability, and the workplace taking the leading role

We are undertaking four measures in the 2025 MTP. The first of these is “thoroughgoing safety, disaster prevention and quality,” which we have specified as a matter of the highest priority in gaining our stakeholders’ unwavering trust. The second measure is “business portfolio realignment,” in which we assess each business with respect to the two axes of profitability and growth potential. We categorize this among the four quadrants of “businesses to be newly developed,” “businesses to be prioritized for expansion,” “businesses requiring improvement,” and “businesses with stable profit.” We then implement measures at each business stratum. Our three pillars of growth are film, life science, and environmental and functional materials. The third measure is “preparing for the future,” in which we take a long-term perspective on advancing the creation of innovations in which we combine core technologies with marketing and digital technologies and know-how.

The fourth measure is “rebuilding our foundation,” in which we advance reconstruction according to five themes in order to establish a robust structure for sustainable growth: Developing human resources and promoting diversity, frontline workplace manufacturing capabilities, development of business infrastructure, governance and compliance, and reform of organizational culture.

Transformation to sustainable growth: 2025 Medium-Term Management Plan

Measure 1 Thorough safety, disaster prevention, and quality

• In fiscal 2023, we achieved zero serious accident incidents

In line with our Master Plan for Safety and Disaster Prevention, we are systematically advancing active investment in disaster prevention and renovation of aging facilities. We have also installed a disaster prevention training space to carry out education that raises the awareness of on-site staff and individual managers toward safety and responding in the event of disaster.

Where quality is concerned, we are taking on a major revision of our promotional structure while also reforming our organizational culture, with the aim of fostering a new culture of quality assurance.

In efforts to create a structure that ensures the sustainability of our business, we are also reinforcing our system of risk management on the premise that risk is ever-present.

Although this in itself is not sufficient assurance of thoroughgoing safety, disaster prevention and quality, which are works in progress, we did achieve zero serious accidents in fiscal 2023. By implementing quality assurance training and thorough PL/QA assessments, we made progress in fostering a culture of quality assurance. We continue to advance each of these measures, including the development of a group company governance structure.

Implement of "Zero Disaster," our Master Plan for Safety and Disaster Prevention	Review
<ul style="list-style-type: none"> Measures to address items noted in comprehensive workplace and disaster prevention inspections Investment in safety and disaster prevention, and renovation of aging facilities Safety and disaster prevention training, creation of a culture of safety (safe, secure workplaces) Establishment of management systems for disaster prevention and safety 	<ul style="list-style-type: none"> Execution and progress for each action Introduction of ISO 45001 (Iwakuni) 11 lost-workday accidents (zero serious) Security awareness (dependent-type)
Rebuilding of our quality assurance management system	Review
<ul style="list-style-type: none"> Reinforcement of personnel and structures, creation of mechanisms and adoption of systems Quality assurance training, creation of an organizational culture, and a culture of quality 	<ul style="list-style-type: none"> Company-wide implementation of improvement projects In-house quality assurance seminars ISO and FDA approval
Strengthening of Toyobo group governance, risk management structure	Review
<ul style="list-style-type: none"> Risk map (grasping risk location and impact: Preparedness) Establishment of group corporate governance→ Establishment of the Group Administrative Management Department Monitoring of system expansion 	<ul style="list-style-type: none"> Risk Management Committee established Identification of fatal risks Implementation from non-consolidated to group

Measure 2 Business portfolio realignment

• Each business evaluated and classified along two axes: Growth potential and profitability

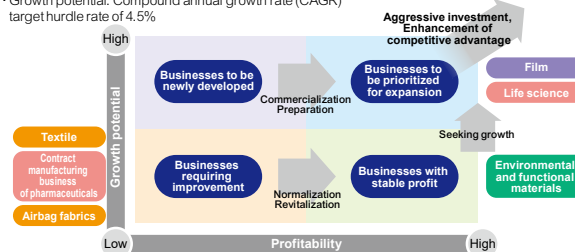
In our categorization among the four quadrants, comprising "businesses to be newly developed," "businesses to be prioritized for expansion," "businesses requiring improvement," and "businesses with stable profit," the average annual growth rate is our criterion for judging growth potential, for which we have set a guideline of 4.5%, which is the acknowledged average for the chemical industry. Return on capital employed, the criterion for judging profitability, is set at 6.5% from the perspective of capital costs.

In fiscal 2023, we invested capital aggressively in businesses prioritized for expansion. In the environmental and functional materials business, identified as a business with stable profit, we established TOYOBO MC Corporation in April 2023. For businesses requiring improvement, including textiles, airbag fabrics and contract manufacturing of pharmaceuticals, we are aiming to achieve profitability in each by fiscal 2026 in line with their respective Master Plans. In the textile business, we established the new TOYOBO TEXTILE CO., LTD. in April 2022, integrating and reorganizing group companies in efforts to boost profitability and efficiency of assets. In the airbag fabrics business, we established Toyobo Indorama Advanced Fibers Co., Ltd.

Ideal portfolio concept

Each business evaluated and stratified among four quadrants along the two axes of profitability and growth potential

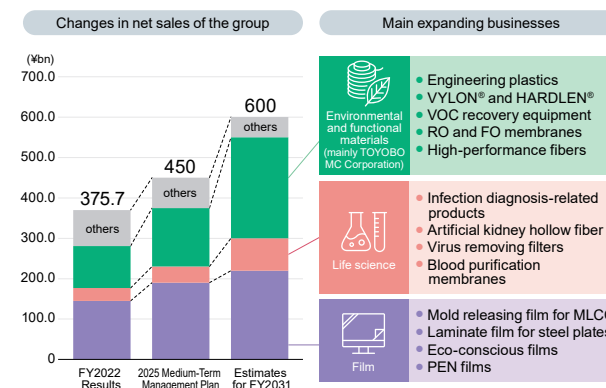
- Profitability: Return on capital employed (ROCE) = operating profit ÷ capital employed * target hurdle rate of 6.5%
- Growth potential: Compound annual growth rate (CAGR)* target hurdle rate of 4.5%



- Rather than the hurdle rate alone, include qualitative information to determine whether a business is one with stable profit or needs improvement
- ROIC is used as a capital efficiency indicator for the group as a whole, while ROCE is a management indicator for each business

in October 2022 as a joint venture with the Indorama group in Thailand.

Although each plan has been moving ahead steadily, reaping the effects of these efforts still lies ahead. The plans will demonstrate effect in fiscal 2024.



• Three businesses comprising the pillars of sustainable growth

Our target of ¥600 billion in group sales for fiscal 2031 includes a target of ¥220 billion for our core film business, ¥80 billion for life science, in which we expect growth starting in fiscal 2026, and ¥250 billion for environmental and functional materials through the newly established TOYOBO MC Corporation. Amid the advance of carbon neutrality and electric vehicle (EV) expansion, major business opportunities are expected for the environmental and functional materials business, which we expect to become a third pillar of business alongside film and life science.

As cost structures undergo major changes, we changed packaging film from a business prioritized for expansion to a business with stable profit, under the idea that stable earnings should be prioritized over growth. Also, engineering plastics, functional materials, and environmental solutions, which we had categorized as businesses with stable profit, are to be expanded aggressively as growth businesses within TOYOBO MC Corporation.

Transformation to sustainable growth: 2025 Medium-Term Management Plan

Measure 3 Preparing for the future

• Obtained SBT certification for GHG emission reduction targets toward carbon neutrality

Through our DX strategy to promote and accelerate business innovation, we aim to create new businesses and business models. We are advancing investments in updating our legacy systems as investments in establishing the IT infrastructure that forms the basis of this effort.

We have formulated a roadmap for carbon neutrality (CN), which we are striving to achieve. We received Science Based Targets (SBT) certification in December 2022 for our GHG emission reduction targets. Raw material and fuel costs have increased temporarily due to factors including the adoption of renewable energy, but given that future cost increases are expected to result from factors including carbon pricing, we have set aggressive targets.

Creation of new businesses and technologies <ul style="list-style-type: none"> Creation of innovations (four core technologies x marketing x digital → integration and restructuring) New business creation (Mirai Value Proposition Project, Open Innovation expansion) Establishment of research infrastructure and development of human resources to support these 	Review <ul style="list-style-type: none"> Mirai Value Proposition Project Expanding areas of MI utilization in research departments Talent management + training
DX Strategy: Acceleration and advancement of business innovation <ul style="list-style-type: none"> Establishment of IT infrastructure (Business systems / IT infrastructure, security) Refinement of business processes and services (Establishing data utilization infrastructure) Business model co-creation (expansion of partnerships inside and outside the group) 	Review <ul style="list-style-type: none"> Eliminating hosting and updating legacy systems Considering MI utilization and marketing automation (MA) adoption Partnerships within and outside the group
Roadmap to carbon neutrality (2050) <ul style="list-style-type: none"> Setting of GHG emission reduction targets (Scope 1 and 2) Renewal and fuel conversion of in-house thermal power plants (coal → liquefied natural gas) Introduction of a cross-functional team for CN strategy deliberation and adoption of internal carbon pricing 	Review <ul style="list-style-type: none"> Execution and progress for each action SBT certification obtained Issuance of sustainability-linked bonds

• Clarify targets through the vision for creating innovations

In April 2023, we formulated the Toyobo group vision for creating innovation.

By combining core technologies from the disparate fields of polymers and biomedical technology, we will create new opportunities and bring about innovation in three new fields (solutions). Our New Circular Plastics Solution can be expected to have applications in bio-foundry platforms and other bio-manufacturing technology. With our Environmentally Active Clean Solution, we are pursuing the potential to apply technologies that put unutilized biomass to use, and with our Well-Being Solution, we are pursuing uses for biocompatible polymers in medical applications.

We also clarified priority themes for new business fields. Chemical recycling and 100% biomass plastic development are representative examples in the area of renewable polymers, as is the development of sepsis treatment devices in the field of acute blood purification. Regarding research reagents, we made progress with commercialization of enzymes with applications in pharmaceuticals manufacturing.

Assignment of priority themes to new business areas



Measure 4 Rebuilding our foundation

• Start of human resources development for diversity and management under our new personnel system

The group's key business foundation consists of people, infrastructure, and systems. We made major revisions to our personnel system, which was renewed in fiscal 2022, with a job-type orientation intended to strike a balance between work duties and remuneration, including an overhaul of the seniority system and establishment of a system for promoting junior employees to executive positions. From fiscal 2023, we have created increased opportunities for those with motivation to play more active roles, and are including junior personnel in our development of human resources for management. In our efforts to promote diversity, we have revised our promotion system into one that is more inclusive of diverse human resources such as women and foreign personnel, aiming for a ratio of women in management positions of 5.0% or more by fiscal 2026.

Human resources development, work-style reform, promotion of diversity <ul style="list-style-type: none"> Personnel system reform: Appraisal, training expansion, rotation, assigning the right person to the right job Development of next-generation management human resources, promotion of active participation by women (women's leadership development) 	Review <ul style="list-style-type: none"> Development of next-generation management human resources, new human resource system Women's leadership training, emergence of women board members
Front-line workplace manufacturing capabilities <ul style="list-style-type: none"> Innovation in production and reinforcement of training for technical personnel 	Review <ul style="list-style-type: none"> Construction of a platform for manufacturing Establishment of education for technical personnel, reinforcement of level-specific education
Establishment of business infrastructure <ul style="list-style-type: none"> Renewal investment, consideration of company-wide business site location concept Legacy systems updates 	Review <ul style="list-style-type: none"> Renovations moving forward at each business site Legacy systems to be updated
Governance and compliance <ul style="list-style-type: none"> Governance system restructuring, group administrative management Strengthening of compliance system and internal audit functions 	Review <ul style="list-style-type: none"> Strengthening of compliance promotion system Compliance incident occurrence
Reform of the organizational culture <ul style="list-style-type: none"> Spread of corporate philosophy framework PVVs, organizational development, "casual discussions on serious issues" 	Review <ul style="list-style-type: none"> Spread of PVVs, from KAERU Project to KAERU Department Engagement Survey (55% / target 70%)

Innovation

Vision for creating innovation

We have formulated a vision for creating innovations, aimed at achieving Sustainable Vision 2030, and looking beyond it to 2050 as we work to achieve sustained and discontinuous growth, which amounts to increasing our corporate value. Under this vision, Toyobo group makes a declaration that we will realize innovations needed by people and the earth.

“Beyond Horizons,” a declaration

In progressing toward 2050, we at Toyobo group aim to provide solutions through the integration of our core technologies and businesses, creating innovations in a wide range of fields as our contribution toward the development of a sustainable future for society.

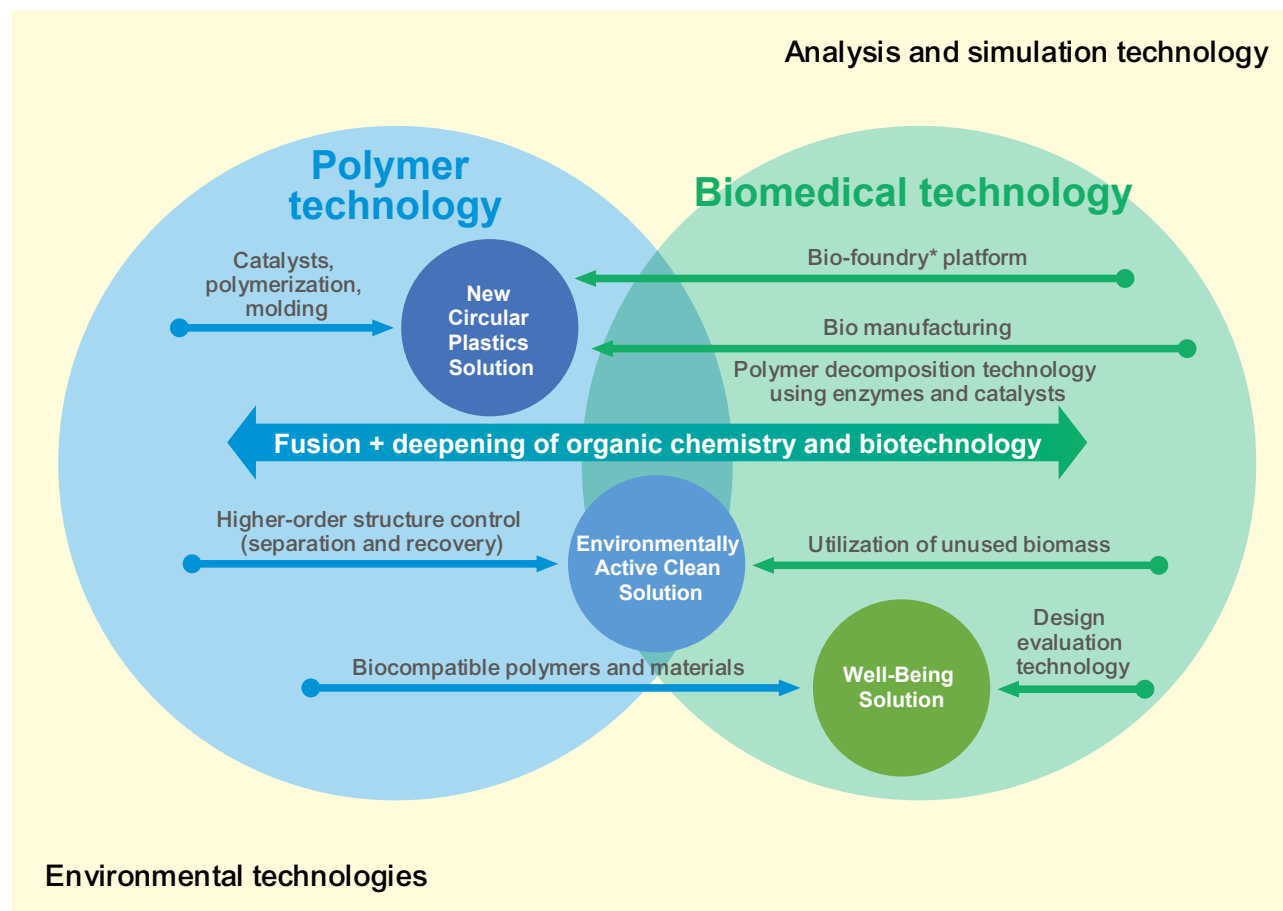
Through its long history of more than 140 years, Toyobo group has combined a wide range of materials, processes, and processing techniques to create and implement its own value. We will greatly value these technological development capabilities that are the source of our competitiveness, create innovation through the technologies accumulated up to now as well as those newly undertaken, and contribute to the sustainable development of society by providing products that bring about solutions to social issues.

In envisioning ourselves in 2050, Toyobo group will emphasize three areas of our value proposition to realize a future that is needed by people and the earth.

Key areas of our value proposition toward creating innovations

By combining and rebuilding our four core technologies (polymer technology, biomedical technology, environmental technology, and analysis and simulation technology) as well as our business value chains and markets (film, environmental and functional materials, life science, and functional textiles and trading), Toyobo group is working to create a wide range of solutions.

Taking on challenges in new domains by integrating core technologies and businesses



*Bio-production systems such as cultivation, transport, and contract manufacturing aimed at enhanced productivity and reduced cost for bio-derived products

Innovation

Vision for creating innovation

In order to achieve the future we envision for 2050, we will advance research and development efforts in three priority areas for provision of value: Our New Circular Plastics Solution targeting 100% renewable polymers, our Environmentally Active Clean Solution that helps with environmental cleanup and CO₂ recovery and utilization, and our Well-Being Solution that aims for a society in which people can live out their lives in good health. Our aim in doing so is to solve the five social issues specified in Sustainable Vision 2030.

Four actions leading to creation of innovation

Within the three key areas of our value proposition, we aim to create sustainable innovations through the following four actions.

(1) Assign prioritization themes

Promote prioritized research and development, including adoption of new technologies, in responding to social issues with an awareness of people and the earth

Measures: Prioritize technology investment for new business development

(2) Take on challenges by integrating core technologies and businesses (see p.25)

Integrate existing businesses and technologies, and establish marketing innovation throughout the company

Measures: Integrate polymer technology x biomedical technology + business

(3) Accelerate open innovation

Build structure that actively promote new market participation and adoption of new technologies

Measures: Engage in corporate collaboration across industry boundaries, direct and indirect startup investment, and partnerships with universities, etc.

(4) Develop human resources

Nurture human resources with scientific literacy and entrepreneurial spirit, enable each to refine their skills, and create a basis for human resources exchange, while providing a space in which they can apply their knowledge and experience to the fullest

Three priority areas for provision of value in innovation creation, for the achievement of sustained, discontinuous growth

<p>Sustainable Vision 2030 Solving the five social issues</p>	<p>New Circular Plastics Solutions 2050: 100% renewable polymers</p>	<p>Environmentally Active Clean Solutions Environmental cleanup CO₂ recovery & utilization</p>	<p>Well-Being Solutions Innovative medical devices Reagents and devices for ultra-early diagnosis</p>
<p> Employee well-being and human rights in the supply chain</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>
<p> A healthy lifestyle and health care</p>	<p></p>	<p></p>	<p>✓</p>
<p> Smart communities and comfortable spaces</p>	<p>✓</p>	<p></p>	<p>✓</p>
<p> A decarbonized and circular society</p>	<p>✓</p>	<p>✓</p>	<p></p>
<p> Clean water areas, air, and soil, and the preservation of biodiversity</p>	<p></p>	<p>✓</p>	<p></p>

Innovation

Research and development



In order to create and provide solutions centering on the four core technologies, Toyobo group will reinforce its structure aimed at improving efficiency of research and development and speed up the commercialization so as to achieve diverse forms of innovation.

Basic approach

Toyobo group aims to be a group that continues to create the solutions needed by people and the earth, and will achieve innovations in diverse areas so that we can contribute to the sustainable development of society toward 2050.

The four core technological supports for our group businesses are: Polymer technology, biomedical technology, environmental technology, and analysis and simulation technology. With these core technologies, as well as reconstruction of value chains, application of digital technology, marketing, and diverse other innovations, we will provide new solutions as we continue to contribute to a sustainable society.

Organizational structure

Our R&D organizational structure comprises two components: The Corporate R&D Department and the Divisional R&D Departments. We are also refining the technologies of each of these and working on collaboration including human resource exchange as we strive to make research and development more efficient and commercialization speedier.

• Corporate R&D Department

The Corporate R&D Department includes three sections, which engage in research aimed at acquiring basic technologies and advanced technologies for the future, project research that targets reliable commercialization, and the research infrastructure that has supported the Group's research and development up to now. Analytical technologies including chemical identification, ultramicroscopic observations and measurement of physical characteristics, as well as technologies that use computational science, such as simulations, digital transformation, and materials informatics, enable our creation of next-generation technologies, our new products and new business commercialization, and thus form the basis for our competitive development. The department also

partners with domestic and overseas companies, universities and research institutions to fulfill its role of studying and evaluating new technologies and new technological trends.

• Divisional R&D Departments

As each business department performs integrated operation of its production, sales, and development functions, research and development activities within each business department are related directly to its products and technological trends. We understand customer needs to be characteristic to our products, so we cooperate across areas of business and with the Corporate R&D Department on a routine daily basis to improve our products and strengthen our product lineups.

Coordination of company-wide innovation: The Innovation Strategy Department

The function of the Innovation Strategy Department is to support the management, planning, and promotion of research and development from the perspective of group management. It manages and supports commercialization projects for promising themes advanced by the Corporate R&D Department. In addition, through the effective, efficient operation of research and development resources including utilization of intellectual property, the department participates in research and development projects of the national government, and advances open innovation with universities and other external organizations, while also making use of external venture capital to make investments that expand the possibilities of new fields of technology and product development.

Four core technologies

Our group has four core technologies: Polymer technology which we have been accumulating since synthetic fibers were introduced and which includes polymerization, modification, and processing; biomedical technology developed from our waste pulp liquid

processing research using yeast culture; environmental technology based on polymer technology enabling water and air purification as well as recycling of solvents and other substances; and analysis and simulation technology based on our accumulation over many years of analytical evaluations and computing science. These are at the root of our group's creation of products with natural fibers, synthetic fibers, chemicals and processed products, films, life science and membrane separation, and they continue to deepen, integrate and develop in response to changing times.

Creation of innovations through core technologies

Our group advances open innovation in order to apply our core technologies to solving social issues. We apply the digital technologies that are emerging in rapid succession, and combine our continuously-developing core technologies with innovative and reliable external technologies to remake them into new core technologies while achieving innovation. Our group's aim is to place a high value on our original thinking while creating new products and expanding into domains of business that we have never taken on before.

Innovation

Intellectual property



The innovations by which Toyobo group contributes to society's sustainable development are supported by diverse group assets centered around our four core technologies.

By carefully protecting them, securing them as intellectual property rights, and putting them to use, we will achieve stability in our business operations, high profitability, and sustained growth.

Basic approach

By creating innovations based on our four core technologies of polymer technology, biomedical technology, environmental technology, and analysis and simulation technology, our group will contribute toward the resolving of social issues. We will then aggressively secure and put to use the results of these efforts as intellectual property rights including patents, and will stabilize our business operations and achieve high profitability, which will contribute to our sustained growth.

Organizational structure

The Intellectual Property Department meets regularly with the intellectual property liaison persons assigned to each department at liaison meetings in order to share information on intellectual property and make related activities more effective.

Intellectual property strategy development

The Intellectual Property Department collaborates closely with business and R&D departments, formulating intellectual property strategies and seeing to coordination between business and R&D strategies. It reports twice a year to the Sustainability Committee regarding intellectual property strategy, and advances strategy while checking on its consistency with company-wide policy.

Building a patent portfolio

We have built a flawless, high-quality patent portfolio to ensure that our products have predominance, and proactively maintain contacts among research and development experts to discover inventions. We aggressively apply for overseas patents for completed inventions to ensure the security of their global deployment and promotion.

Toyobo group brand management

All items to be displayed outside the company are checked by the departments such as legal, quality, public relations, pharmaceutical,

so that labels and other displays are appropriate as we strive to elevate our group's brand value and gain the trust of the customers.

Respect for the rights of others

Patent reviews are performed in conjunction with design reviews according to the stage of new product development, as we advance development while being careful not to infringe on the rights of other parties. In addition, we hold regular patent review meetings to understand the patent-holding status of other companies, and to confirm the security of business continuity while respecting others' rights.

Initiatives

• Use of intellectual property information

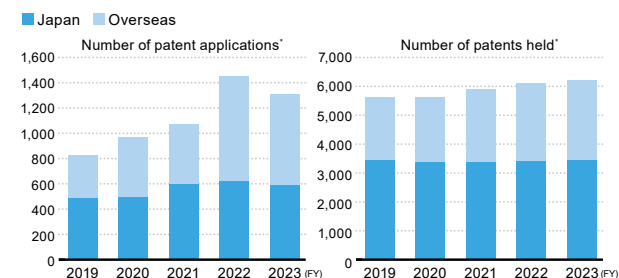
We analyze patent and non-patent information, and carry out activities to put the inferred technological and market trends to use in our business and R&D strategies. In addition, we intend to make our business operations more efficient and sophisticated by applying digital technologies to enable paperless operations and robotic process automation (RPA), which we started as part of our early adoption of a workflow system.

• Invention incentive system

Through our patent award system, we honor inventors whose patents contribute to company profits at or above a specified threshold level, offering a cash reward (with no upper limit) commensurate with the profit. In order to honor the inventors early on, an "Application Commendation" is conferred on inventors who hold pending applications for patents expected to make a future contribution. Also, in order to stimulate the solutions business, from fiscal 2023 inventors holding pending applications for patents highly likely to help solve social issues are honored with an "Excellent Solution Application Commendation."

• Intellectual property education

We perform systematic education on intellectual property according to job group and function. We hold practical patent seminars for engineering-related employees during their first three years of employment to enable them to learn about patents. We also conduct education specializing in patent searches and the production of detailed descriptions for patent applications. Through lectures that include practical hands-on training, participants work with Intellectual Property Department members to gain competence in producing high-quality detailed descriptions. In addition to engineering-related personnel, sales personnel also receive education in intellectual property-related knowledge that is requisite for sales.



* Figures include patent applications and patents held by the (former) Toyobo Film Solutions Limited, which was merged into TOYOBO on April 1, 2021.

Toward digital transformation

— Transforming into organizations and human resources that can co-create business —

Toyobo group aspires to be a group that continues to create solutions needed by people and the earth. We strive to advance business innovation and realize an accelerated IT environment while addressing not only the issues facing us today but also those we can expect in the future.

Our vision for digital transformation

Given that digital transformation (DX) is a means of advancing and accelerating business innovation, it is crucial that we understand how it can contribute to business expansion. By establishing IT infrastructure and building up a DX promotion structure, Toyobo group is moving forward with human resource development and organizational transformation enabling us to co-create business as we pursue our 2030 objectives of doing business that contributes to solving the issues facing people and the earth, being a company where people can continue to work with pride and satisfaction, and being a company that grows sustainably.

Initiatives to advance DX

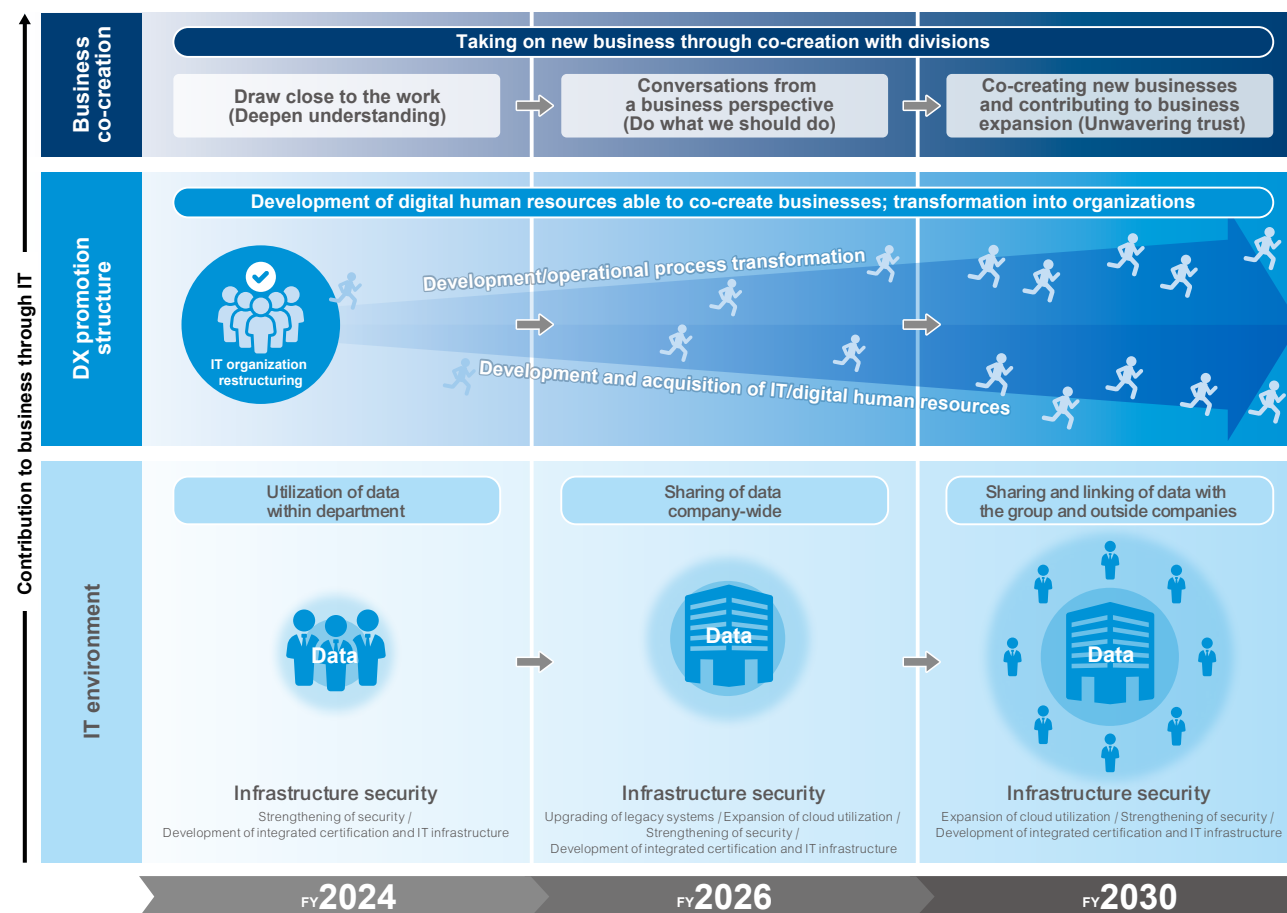
As we aim for collaborative work between the digital promotion division and business divisions that creates new business, we will develop human resources for DX with competence in business co-creation, transform our organization, and work on establishing our IT environment, by means including updating legacy systems.

In fiscal 2023, we drew up a DX roadmap oriented toward business co-creation, designed the organization and process for DX advancement, and formulated a plan for human resources development. We also started work on establishing an IT environment to provide a foundation for the initiative, and focused effort on building up infrastructure for DX advancement. In fiscal 2024, we will complete our preparations for accomplishing DX as we take action in three areas: Establishment of IT infrastructure, strengthening of governance and organization, and promotion of business co-creation.

Priority themes for fiscal 2024

1	Establishment of IT infrastructure	<ul style="list-style-type: none"> Steady updating of legacy systems Establishing an information infrastructure prepared for the future
2	Strengthening of governance and organization	<ul style="list-style-type: none"> More sophisticated DX investment cost management Transition to an organizational structure that helps with business co-creation
3	Promotion of business co-creation	<ul style="list-style-type: none"> Advancing company-wide themes oriented toward societal needs like GHG and chemical substances management Holding regular meetings with business divisions regarding DX promotion

Steps to advancing DX to promote and accelerate our vision for business innovation



Toward digital transformation

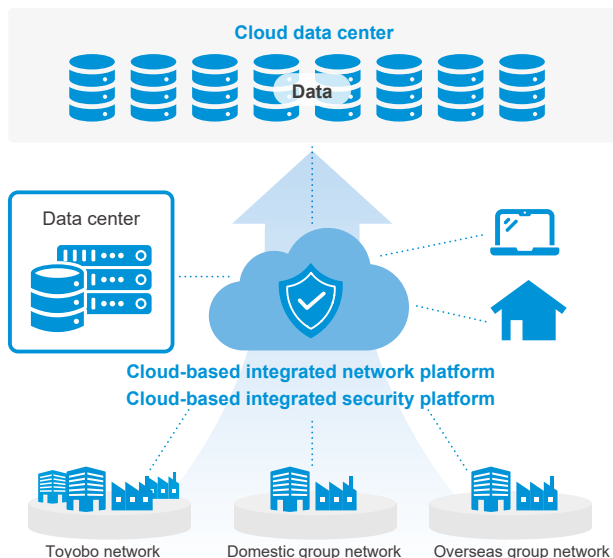
Priority Theme 1 Establishing IT infrastructure

Our group is moving ahead with investments for renewal of our legacy systems. In fiscal 2024, pilot implementation begins for a new core online system, and by fiscal 2027, we plan to have finished our reinforcement of security and conversion to cloud computing.

As we move ahead with revamping systems peripheral to our new IT infrastructure implementation, we will be building up an IT infrastructure that enables safe, flexible data utilization and collaboration, not just between divisions, but also within and outside of the group.

As an example, once the system renewal is complete, we will expand investment in DX projects and others that contribute to business expansion. By fiscal 2031, we will have established an IT environment enabling immediate, secure sharing of information with every future partner.

Concept for future IT infrastructure

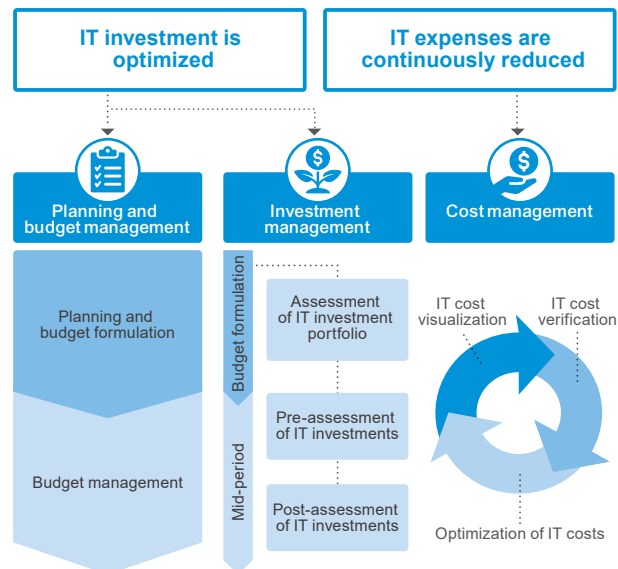


Priority Theme 2 Strengthening governance and organization

Our group's adoption of IT has been advanced by our subsidiaries involved in information-related businesses for approximately 30 years. Amid the shift from IT utilization to the DX era, in fiscal 2024 we will apply the organizational strengths in systems construction and operation that we have established to designing business expansion-oriented themes for co-creation between business divisions and with external partners, as we work to strengthen organizational functions other than manufacturing, such as by shifting from an individual concept of optimization to overall optimization.

Moving forward, we will optimize IT investment through planning and budgeting management and will strengthen the systems that enable us to bring about continuous reductions of IT expenses through cost management. We will undertake organizational reforms to make ourselves an organization truly capable of helping our business expand, such as human resources development and self-directed career visioning by each and every employee, as well as improvements in awareness enabling us to take on our work with a sense of purpose.

Strengthen governance (refine DX promotion cost management)

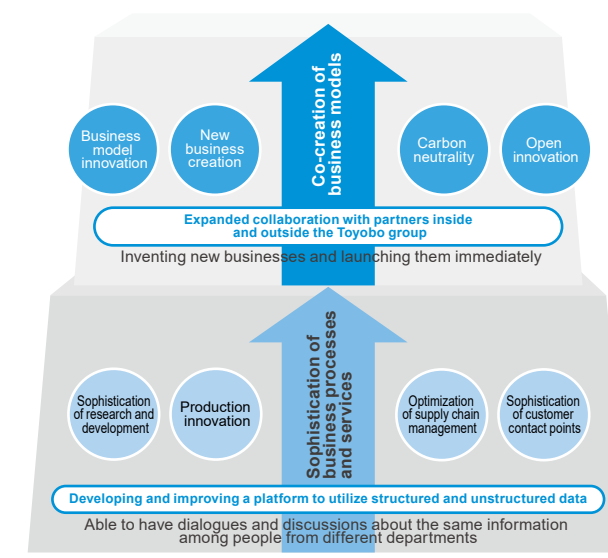


Priority Theme 3 Promotion of business co-creation

In our business divisions and innovation divisions, actions are oriented toward advancing digital and IT themes that contribute to business expansion, and toward advancing digitalization through business reform. As a manufacturer, we set priorities for resource allocation with attention to putting in place the infrastructure directly related to our manufacturing, and also to the impact on our business as seen from a bird's-eye view of all business divisions. Individual discussions that had previously been conducted by those in charge in the front-line workplace are conducted at regular meetings held by top managers of business divisions for overall optimization.

Some themes require efforts to be taken by the company as such, including environmental issues such as carbon neutrality and chemical substances management, and response to human capital. By setting targets and building systems, the DX promotion department takes a central role in company-wide efforts to make steady progress.

Business co-creation by upgrading business processes and services



SCM: Supply chain management