TOYO ENGINEERING

Integrated Report 2024

Year ended March 31, 2024

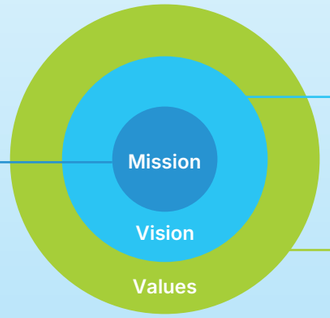
Engineering for Sustainable Growth of the Global Community

Engineering for Sustainable Growth of the Global Community

TOYO's MVV

Mission, Vision, Values

Engineering for Sustainable Growth of the Global Community



Global Leading Engineering Partner

Integrity, Creativity, Diversity, Learning, Team

About TOYO's MVV

Editorial Policy

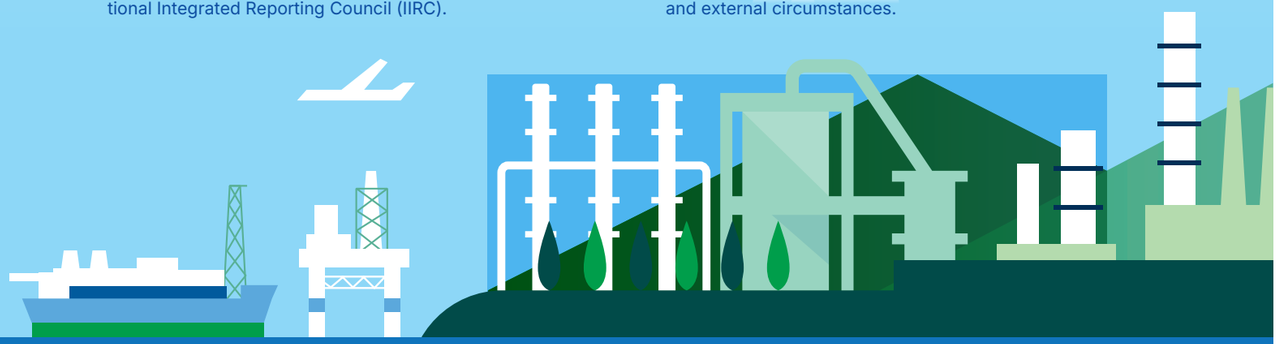
Integrated Report 2024 was created to offer a wide range of stakeholders in Japan and overseas a deeper understanding of TOYO's management policies and business models and understanding of the potential for sustainable enhancement of our corporate value. Under our view of human resources, technologies, and global networks as non-financial capital (intangible assets) that ensure competitive advantage for us in the medium to long term, we present our strategy for each of these along with our financial capital strategy. In editing this report, we have referred to "Guidance for Collaborative Value Creation" issued by the Ministry of Economy, Trade and Industry (METI) and to "International Integrated Reporting Framework" issued by the International Integrated Reporting Council (IIRC).

Period covered

Fiscal 2023 (April 2023 to March 2024). However, when the presentation of more recent cases or past circumstances and data is appropriate, information from outside this period is reported.

Note concerning forward-looking statements

Performance outlooks in this Integrated Report are based on judgments and assumptions made on the basis of currently available information. Actual performance may differ significantly from targets due to uncertainties inherent in judgments and assumptions and due to potential fluctuations caused by future business operation and changes in internal and external circumstances.



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What is TOYO's role in society? What is our aim?

Our top management discusses TOYO's value co-creation engineering, Medium-term Management Plan, and practice of sustainability management driven by the human resources, technologies, and global networks that are indispensable intangible assets and sources of growth, all aimed at the enhancement of our corporate value and the creation of social value.

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Creating corporate value through a team of professionals with advanced technical skills and expertise.

Eiji Hosoi
Representative Director,
President & Chief Executive Officer

PROFILE

Eiji Hosoi joined the company in April 1982. He gained extensive experience leading projects in various locations, including Saudi Arabia, Thailand, Indonesia, and India, where he successfully completed numerous plants as Project Manager. From 2015 to 2018, he served as President of the Indonesian subsidiary IKPT, transforming the company into a capable builder of diverse plants, including those in the oil and gas, chemical, fertilizer, power generation, and infrastructure sectors. In 2019, he was appointed Unit Director of the Plant Business Unit, where he established a carbon neutrality team and developed new business fields to complement the existing operations. In June 2023, he was appointed Representative Director, President, and Chief Executive Officer.

TOP MESSAGE

The future TOYO that society needs.

Continuous technological advancement is essential to fulfilling our Mission.

TOYO established its MVV (Mission, Vision, Value) in 2009. Our Mission, “Engineering for Sustainable Growth of the Global Community,” embodies the very reason for TOYO's existence. In addition to supplying the energy and materials essential for society's sustainable growth, our Mission as an engineering company is to provide solutions to the diverse challenges and needs of clients and society, with a strong focus on global environmental conservation.

I perceive engineering not merely as manufacturing but as a service that creates unique outcomes by logically and organically integrating wisdom, knowledge, and various technologies. To me, true engineering means continually addressing the growth of society and solving its problems, without being constrained by conventional thinking. At the core of this endeavor are always technical capabilities. TOYO’s essence has always been technology, a principle that has remained unchanged since our founding. Continuous technological improvement and evolution are essential to fulfilling our Mission. Our second president, Naito, emphasized that “self-improvement, driven by mutual aspiration for progress, is of the utmost importance” for technology advancement. Keeping this in mind, I regularly challenge both myself and my employees to reflect on how we approach our daily business and work.

Adopting a new approach to risk management and navigating an era of profound change through diverse technologies and expertise.

TOYO provides engineering services designed to meet the needs of society and our customers. In many instances, we have undertaken projects using a “lump sum turnkey” contractual model, where we are responsible for bundled Engineering, Procurement, Construction, and Commissioning (EPC) services. As a result, we are recognized both as an “EPC contractor” and an “EPC risk taker,” managing the inherent risks of plant construction projects. These risks include geopolitical risks, conflicts, price volatility, and logistical disruptions. Effectively managing these challenges to ensure project success is the role and mission required of engineering companies.

In recent years, however, the concept of risk-taking has evolved. Global pandemics and conflicts are having an increasingly significant impact, while carbon neutrality projects are facing technological challenges and rising costs. The scale of projects is expanding, and construction costs are increasing accordingly. As a result, risk provisions now play a critical role in investment decisions, and in some cases, EPC risks are becoming too large for a single company to shoulder.

Therefore, it is becoming increasingly important to work collaboratively with clients and suppliers to manage risks, rather than bearing them alone. A new approach is emerging: one that involves accurately identifying risks, preventing losses, and managing risks through cooperation among multiple parties. As an engineering company, we are now required to collaborate with related businesses, propose innovative ideas, offer support, and advance projects in a manner that ensures mutual economic viability—free from traditional business frameworks. In doing so, it is vital that we create new value by working alongside relevant companies throughout the supply chain to advance carbon neutrality.

Society is constantly evolving, and the pace of change is becoming more rapid and significant. In this era of immense transformation, I believe that true engineering lies in our ability to adapt to the times through the application of our diverse technologies and knowledge. This is what society expects from TOYO.

Tackling New Value Creation through Co-Creation Engineering

Guiding new technologies toward societal implementation by leveraging our accumulated diverse technologies and knowledge.

In recent years, projects related to carbon neutrality have increased significantly, creating a strong tailwind for TOYO. This presents a major opportunity to develop new business fields by leveraging our technical expertise and knowledge in areas such as fuel ammonia, hydrogen, methanol, and SAF (Sustainable Aviation Fuel) using FT synthesis technology. However, there are challenges as well, including soaring costs for materials, equipment, and transportation, and the difficulty of securing top-tier construction companies and engineers. Carbon neutrality projects, in particular, require extensive technological development and cost reductions, which extend the timeline for their realization. For this reason, it is crucial to first ensure proper project management and profitability within our existing business fields.

Looking at the broader business environment, changes in the global landscape are generating both opportunities and risks. For example, in India, with its population of 1.4 billion, the rapid pace of infrastructure development has led to a shortage of construction workers. Simultaneously, advances in business efficiency through AI and IoT are increasing power consumption, making energy supply a key issue. Opportunities and risks coexist across regions and sectors. As a comprehensive engineering company, the question for us becomes: how can we minimize risks while maximizing opportunities? This is where “Co-Creation Engineering” becomes a vital initiative.

Even when a company has the basic technologies and ideas to address societal issues, the challenge lies in developing the technology to a level that allows for commercial-scale production, ensuring a stable supply, and establishing it as a viable business. Achieving societal implementation of technologies and ideas requires a series of steps, including setting a vision and goals, developing production technologies, creating and licensing intellectual property, ensuring economic feasibility, and constructing a value chain.

As a partner to companies, universities, and research institutions working to solve societal issues through new technologies, TOYO collaborates at every phase of development—from basic research to societal implementation—and aims to create businesses around these new technologies.

One of our most recent projects involves joint development of technology to convert mixed waste plastics into oil for recycling into plastic raw materials. Currently, most plastic waste is discarded, contributing to ocean pollution, a major social issue. By making waste plastic recycling more efficient and less labor-intensive, we can significantly increase the recycling rate, thereby making a substantial contribution to society.

In this effort, TOYO has partnered with a Thai company that developed the basic technology to convert waste plastics into oil. We have launched a co-creation project that spans from demonstration plant technology development to societal implementation. As a comprehensive engineering company, we are utilizing our diverse technologies and expertise to address the challenges posed at the demonstration plant, from chemical process development to mechanical engineering. Looking forward, we will drive further development with a view toward scaling the technology for commercial use and licensing it to third parties.

About co-creation engineering

An introduction to TOYO’s concept of co-creation engineering, our initiatives for social implementation, and an example of co-creation in Thailand.

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Steady Progress in Our Medium-term Management Plan Accelerating Growth by Reinvesting Knowledge and Profits from Advanced EPC Operations into New Technologies and Business Fields

Transforming Our Business Portfolio Monetizing New Business Opportunities

I'm pleased to report that we made strong progress toward our numerical targets for fiscal 2023, the third year of our Medium-term Management Plan. We achieved 5 billion yen in consolidated net income from our core business, excluding extraordinary income. We are on track to meet our average consolidated income target of 5 billion yen for the three years ending in fiscal 2025, the final year of the plan. Our return on equity (ROE) was 9.3% for the last fiscal year (17.4% when including extraordinary income), putting us within reach of our 10% target for fiscal 2025.

Breaking down our performance by business, we’ve exceeded our target for non-EPC businesses, which we aim to have on par with EPC businesses by FY2030. As of fiscal 2023, non-EPC businesses have already grown to 58% of our overall business mix. Another key indicator, the “Gross Profit Composition Ratio of Main Global Network” shows that we have also reached our goal of a 50-50 split between TOYO-Japan and global group networks, achieving a 59% contribution from our global companies in fiscal 2023.

In our Advanced EPC Operations, we are pursuing two main themes: “Deepening Group Operations” and “DXoT” (Digital Transformation of TOYO). In fiscal 2023, we saw both results and challenges emerge. The 59% contribution from 追our global network is a direct outcome of our strategy to execute EPC projects through both domestic and international group companies in existing business fields. Meanwhile, DXoT has led to significant progress in business efficiency and risk management, driven by work reforms and the development of digital tools. This has already started to improve profitability, particularly in our EPC businesses. However, the number of projects fully utilizing DX throughout the entire process—from design to construction—remains small at this stage.

Looking ahead, we expect to apply these technologies to newly awarded projects, further boosting profitability. Our next goal is to accelerate growth by reinvesting the knowledge and profits generated from Advanced EPC Operations into “new technologies and new businesses.” While we aim for a 50% gross profit contribution from new business areas by fiscal 2030, we were at 9% in fiscal 2023. This is primarily due to the long timelines required to solve the technological and cost challenges in carbon neutrality projects. However, we are laying the groundwork in various new business areas, and we anticipate reaping the rewards in the coming years.

In the non-EPC sector, we successfully secured multiple urea licensing agreements in fiscal 2023, including for a fertilizer plant in Indonesia. Our services for new plant studies, such as feasibility studies (FS) and Pre-FEED, are growing rapidly in the fields of fuel ammonia, SAF, and renewable methanol. These projects are expected to move to the EPC stage in the coming years, generating substantial profits. Additionally, our HERO, an energy-saving and GHG reduction service, has attracted orders from petrochemical companies in Japan, Europe, and Thailand. We plan to further these projects by implementing modifications based on our proposed plans, leading to GHG reductions and operating cost savings, with compensation tied to performance.

We also delivered solar carports (parking lot rooftop solar power systems) to SEVEN-ELEVEN JAPAN CO., LTD. for their environmental impact reduction demonstration stores. Looking forward, we are working on expanding the solar carport business through a subscription-based model. Our goal is to achieve 2 billion yen in net income by fiscal 2030 through investments in solar carports, fuel ammonia, and the geothermal carbon neutral park concept.

While EPC remains a key pillar of our business, TOYO aims to grow its non-EPC businesses and create a balanced portfolio through diversified business development. By doing so, we will be better equipped to respond to the changing times and manage risks effectively. As part of our current Medium-term Management Plan, running through fiscal 2025, we will continue to enhance EPC profitability through “Deepening Group Operations” and “DXoT.” At the same time, we are making steady progress in sowing the seeds of new technologies and businesses that will yield substantial profits in the coming years. As we approach the next fiscal year and look toward a new Medium-term Management Plan starting in fiscal 2026, we will strive for further growth by transforming our business portfolio and monetizing new business fields.

About our Medium-term Management Plan

An overview of our Medium-term Management Plan and an introduction to our KPIs, KGIs, Sustainable Technology and Business Development, Advanced EPC Operation, and the status of initiatives related to these.

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The Foundation of TOYO's Growth Creating Opportunities for Professionals with Advanced Technical Skills and Expertise

Intangible Assets Driving TOYO's Success Human Resources, Technologies, and Global Networks Supporting Our Growth

TOYO's strengths lie in the intangible assets of human resources, technologies, and global networks, each forming a major pillar of our growth foundation. These assets are critical driving forces for TOYO in achieving sustainable growth.

Human Resources

TOYO values its human resources as part of an organization committed to continuous learning. In a constantly changing world, our employees are always focused on self-improvement, staying alert to how they can adapt to change. Engineers who lack the resilience to keep up will inevitably fall behind. Given the complexity and vastness of today's information, learning in isolation risks leading to biases or missing valuable insights. Therefore, we believe that learning together as a team is essential.

To strengthen our human capital, TOYO is relocating its Head Office to Kaihin Makuhari in Chiba in January 2025. The new office will be designed to foster better communication and enrich the work environment. When announcing the move, I told employees, "You are all project members in creating this new office. Think about the work environment yourselves and shape it to suit your needs. Once completed, this will be a beginning, not an end." The concept is to continually improve and adapt the office to meet our needs as they evolve.

The term "work-life balance" has been around for some time, but I encourage people to add "learning" to both work and life. Continuing to learn is essential in life—whether it's reading, consuming media, interacting with others, or exploring personal interests. I hope that everyone incorporates opportunities for learning into their daily lives, enriching their overall experience.

Technologies

TOYO's technological strengths are key intangible assets, with unique technologies at the core of our business. These include urea, methanol, energy-saving, and GHG reduction technologies. Technologies must evolve daily to stay relevant, which is why it's vital that we continually advance them.

Our Next Generation Technology Development Department (T-Next), a think tank exploring future technologies, is actively involved in this, alongside the Carbon Neutral Division, which promotes carbon-neutral projects, and the Advanced Technology Business Division. By fostering communication between these divisions, we aim to create new business models and encourage collaboration.

To further strengthen our technological base, we established T-Labo, a research institute dedicated to enhancing existing technologies and developing new ones. By integrating IP Management, which leads intellectual property strategy, and DX Solution, which creates customer-focused solutions, we are strategically advancing technology development, intellectual property creation, and business promotion.

Global Network

Our global networks represent another critical intangible asset. A defining feature of TOYO's group companies is their ability to operate as autonomous profit centers, focused on cost competitiveness while enhancing environmental, social, and economic value. This capability has been cultivated over many years of operation.

Our network in India, with a history spanning nearly 50 years, is now capable of executing EPC services for a wide range of plants, including ethylene, ammonia, urea, and petroleum. In Indonesia, we have a track record in geothermal power plant construction, which we are leveraging to expand our geothermal business in Japan. Few engineering companies in the world possess such outstanding global network across major regions.

TOYO's approach to nurturing these global networks is unique. From the outset, we've operated them with a minimal number of Japanese staff, empowering local teams and granting management autonomy. This fosters a strong sense of responsibility and motivation, allowing our global offices to grow with independent talent and leadership. This philosophy not only applies to our global networks but also reflects our broader human resource development strategy. At TOYO, we provide every individual with roles and responsibilities, encouraging them to take on challenges. This policy has naturally evolved into a key part of our corporate culture.

Our Intangible Assets

This introduction highlights the features, strategies, and initiatives surrounding TOYO's intangible assets—human resources, technologies, and global networks—that serve as the foundation of our sustainable growth.

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Practicing Sustainable Management Continuing to Create Positive Impacts on Society

Advancing Our Efforts to Move the World Forward And Solving Social Issues

I believe it is the mission of engineering companies to not only support but, at times, lead the sustainable development of society and the environment. It is equally important for engineering companies to visibly demonstrate the tangible outcomes of their business activities to both society and their employees. At TOYO, I want us to showcase our progress toward our goals and our contributions to society and the environment through measurable results wherever possible. This ensures that all stakeholders, both within and outside the company, share the same understanding and can move forward together.

As environmental issues have gained prominence, the term "sustainability" has become widely used. However, from its founding, TOYO has engaged in corporate and business activities grounded in the principle of contributing to a sustainable society. Every country and society aspire to a better tomorrow, naturally hoping for its continuation—continuation of a prosperous society and a fulfilling life. To ensure the world's survival, TOYO will continue to fulfill its mission through engineering, as we always have. Engineering, as a field, possesses the power to propel the world forward and make substantial contributions to solving social challenges.

To this end, we must consistently provide high levels of added value through technological innovation, human resource development, and the promotion of digital transformation (DX). TOYO's intangible assets—our human resources, technologies, and group companies—are all grounded in technological progress. Our people are professionals dedicated to continuous self-development and learning, evolving daily. Our technologies advance relentlessly to meet the changing needs of society. And our global networks, which grow independently within their regions as autonomous organizations, are vital assets. By merging and continually cultivating the strengths of each individual—who are constantly thinking, growing, and innovating—we will drive the company forward. I believe that these very management activities embody sustainability and enable us to continue creating corporate value while contributing to the advancement of a sustainable society.

We will continue to adapt to society's evolving needs and move forward together with people, businesses, and communities. This, I believe, is the mission of Toyo Engineering and our core purpose.

About Our Sustainability Management

An introduction to TOYO's sustainability initiatives, the connection between our materiality and the Medium-term Management Plan, our roadmap, and our promotion structure.

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TOYO's Business and Connections with Society

TOYO designs and builds industrial plants that produce fuels, electrical power, raw materials for products, pharmaceuticals, and other products indispensable to everyday living. Designing the equipment required in facilities, procuring and assembling equipment from manufacturers worldwide, thinking together with customers about what sort of equipment to ideally build and where, and engaging in environmentally friendly engineering are all important parts of our business.

Recently, in cooperation with numerous companies and countries, we have been engaged in the development of technologies to maximally reduce CO_2 emitted from plants, to manufacture as much CO_2 emissions-free fuel as possible, and to make that fuel available to people safely and securely. In places that go unseen, TOYO is connected to society.

Gas processing plants
Biomass power plants
Geothermal power plants
Energy saving/GHG*4 reduction consulting
Co-creation engineering
Nuclear power plants (decommissioning)
Gas-fired power plants
Petrochemical plants
Synthetic fuel (e-fuel) plants
Waste plastic-to-oil plants
SAF*3 Plants
Biomass-derived chemical plants
Hydrogen/fuel ammonia plants
Petroleum refining plants
CCS*2 facilities
Renewable methanol plants
Fertilizer (ammonia, urea) plants

Synthetic fuels P. 12

Fuel ammonia P. 11

Hydrogen/fuel ammonia receiving terminal

Marine mineral resources plant

FPSO*1

Agriculture

Urea fertilizer is vital to increasing the production of food for a growing global population. TOYO holds patents necessary for urea production.

Pharmaceuticals

TOYO has been involved in the construction of pharmaceutical manufacturing plants for over 30 years, leveraging over 60 years of experience in plant construction. Through technology development, we will support the increasingly advanced pharmaceutical manufacturing demanded by customers and society.

Pharmaceutical plants
Solar carport

Plastics

We are collaborating with other companies on the development of technologies to efficiently recycle numerous types of discarded plastic. Our aim is to solve the problem of plastic waste worldwide and realize a circular society.

Waste plastic recycling plants
On-site PPAs*5 Solar power plants

Electricity

We support social infrastructure with thorough know-how and technical capabilities gained through the construction of varied power plants.

Transmission grid

Building a sustainable society through engineering

*1 Floating Production Storage and Offloading System *2 Carbon Dioxide Capture and Storage
*3 Sustainable Aviation Fuel *4 Green House Gas *5 Power Purchase Agreement

THE POTENTIAL OF TOYO

Realizing an Affluent Society through Clean Fuel

Over the years, TOYO has worked to enhance its energy-saving and environmental technologies through proprietary technologies and technologies in collaboration with licensors. With carbon neutrality as our aim, we will strengthen and advance our technologies and knowledge and will continue tackling the challenges of achieving a decarbonized and circular society, including energy-saving plants, waste plastics, and rollout of fuel ammonia, hydrogen, synthetic fuels, and other next-generation energy sources.

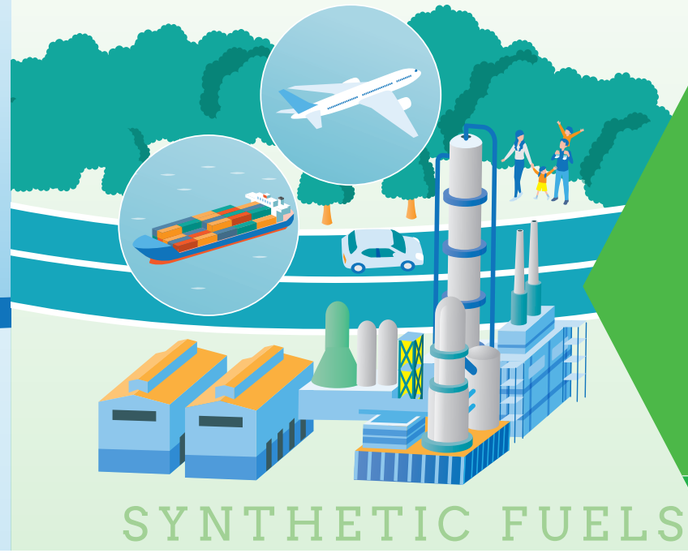
CO_2 emissions-free clean energy

Ammonia will change the future!

TOYO is undertaking the construction of a value chain for clean fuel ammonia that emits no CO_2 during combustion. In addition to existing applications in fertilizers and chemical raw materials, ammonia offers wide-ranging potential as an efficient hydrogen carrier and fuel. Ammonia is attracting particular attention as a fuel for thermal power plants, ships, and naphtha crackers, and is expected to contribute significantly to achieving carbon neutrality.

P. 33 About fuel ammonia

Plant | **Transport** | **Fuel** •Fuel cells •Marine fuel •Power generation fuel



Using CO_2 as a resource to contribute to carbon recycling

Synthetic fuel technology will change the future!

Synthetic fuels derived from renewable energy sources and recovered CO_2, biomass-derived fuels, and similar fuels are ideal for modes of mobility that face a high electrification hurdle. These include long-distance aircraft and large ships, and heavy construction equipment requiring large amounts of power. TOYO contributes to the decarbonization of mobility through sustainable fuel manufacturing technologies.

P. 34 About g-Methanol™ synthetic fuel

Fuel • Jet fuel • Diesel fuel • Naphtha, wax | **Plant** | **Wastes** • Wood chips • CO_2 • Municipal waste

TOYO is bringing ammonia to the world

TOYO has technical capabilities and a track record earned through work on 87 ammonia plants and over 48 storage tank projects to date. We will draw on our experience to promote the use of clean ammonia fuel and realize a sustainable society.

Ammonia manufacturing plant track record
87 plants

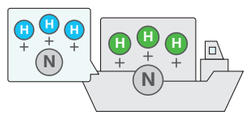
Ammonia storage tank project track record
48 plants +

Use of ammonia fuel

Extract hydrogen

- Petroleum fuel-derived blue hydrogen (H) — * CO_2 released during combustion is recovered
- Renewable energy-derived green hydrogen (H) — * Electrolysis of water

Convert into easily transported ammonia for transport to destination



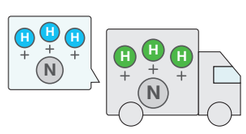
Used as marine fuel, in thermal power generation, etc.

Realizing CO_2 reduction in emissions

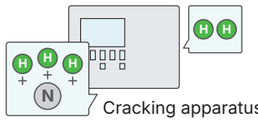
Marine fuel | Gas turbine power generation Fuel conversion from coal | Fuel for ethylene cracking furnaces, etc.

As a hydrogen carrier

Convert hydrogen into easily transported ammonia for transport to destination



At destination, crack ammonia to extract hydrogen



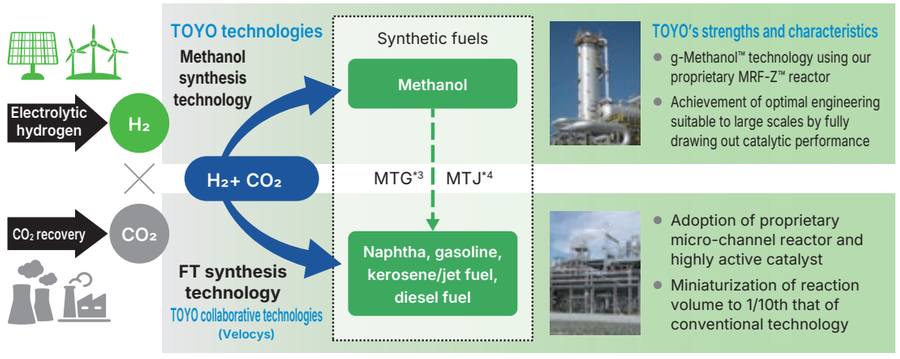
Use of hydrogen in fuel cell vehicles, as power generation fuel, etc.

Realizing CO_2 reduction in emissions

FCV | Gas turbine power generation | Fuel cells

Synthetic fuel and TOYO's technologies

Synthetic fuel (e-fuel) is produced from hydrogen and CO_2 derived from renewable energy, and thus can be considered a decarbonized fuel. As it can be stored for a long time, it contributes to energy security and can be used unmodified with existing infrastructure as a drop-in fuel*1. TOYO possesses key components of synthetic fuel production: g-Methanol™ technology (a proprietary technology) and FT synthesis technology*2 (a partnership technology).



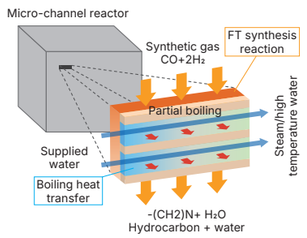
*1 Fuel capable of using existing infrastructure equipment without modification

*2 Fischer-Tropsch synthesis technology, developed in the 1920s in Germany for producing liquid fuel from synthesis gas

*3 Methanol to Gasoline: Technology for producing gasoline from methanol

*4 Methanol to Jet: Technology for producing jet fuel from methanol

Micro-channel FT synthesis technology



Together with Velocys, we have developed FT synthesis technology suited to small and medium-sized companies. The combination of Velocys' micro-channel reactor and high-performance catalysts enables miniaturization of reaction volume to 1/10 that of conventional technology. By minimizing on-site construction through modularization, this technology is suited to local production of biomass-derived fuels and synthetic fuels, difficult to achieve with conventional technologies.

FT synthesis and water cooling are closely combined in micro-channels to efficiently remove the heat generated by FT synthesis and accelerate the process

1/10 the reaction volume of conventional FT synthesis technology

VALUE CREATION STORY

TOYO's Value Creation Model

MISSION

Engineering for Sustainable Growth of the Global Community

Sources of growth

The wellspring of TOYO's sustainable growth lies in our intangible assets: human resources, technologies, and global networks. We will establish a solid business model driven by these intangible assets.

Human resources P. 53

TOYO's intangible assets P.51

Global networks P.67

Technology P.63

Financial capital

Business model P. 15

We offer high-quality services that leverage our strengths in wide-ranging fields of business, aligned with the needs of our customers and society.

Design Companies
Materials and equipment manufacturers
Transport companies
Construction companies
Customers
Alliance partners
Process licensors

Priority areas
- Circular, low-environmental-impact
- CO_2 utilization/ energy conservation
- Next-generation energy
- Resource and energy security
- Quality of Life

Sustainable Technology and Business Development Strategy P. 33

EPC Business
- Environmentally friendly industrial plants/ infrastructure facilities
- High-efficiency plants that concentrate our technologies and expertise

Procurement
Construction
Commissioning
Engineering

Non-EPC Business
Services to resolve customer and social issues based on our EPC business knowledge

Intellectual property/ licensing business
Business planning and feasibility study
Business investment and business operations
PMC and owner's engineering
EPsCm
Co-creation engineering
Performance fee-based and subscription-type business

Medium-term Management Plan P. 27

Advanced EPC Operation Strategy P. 39

- Deepening Group operations P. 40
- ×
- DXoT (Realization of advanced digital technology-driven work transformation and high-value-added management) P. 41

Practice of sustainability management P.23

By reinforcing the corporate governance that is the foundation of our corporate activities, ensuring quality and occupational health and safety, and fulfilling our role as an engineering company, we are making efforts to contribute to the advancement of society and the earth and to sustainably enhance our corporate value.

Materiality (1) Environment
Aim to realize an environmentally friendly society P. 45

Materiality (2) Social
Enrich people's lives P. 9

Materiality (3) Social
People of diverse backgrounds engage in active, meaningful work P. 53

Materiality (4) Governance
Establish an organization with integrity and discipline P. 73

Value creation

Creation of social value

Solving food and energy problems

Cumulative number of orders and business investments, FY2021 to FY2023

Food supply	Energy supply	Foundation for daily living
13	37	75

Contributing to the resolution of social issues through carbon neutral technology and resource circulation technology

Cumulative number of orders and business investments, FY2021 to FY2023

Environmentally friendly 26

Enhancement of corporate value

Increased ROE through transformation of business structure

FY2024 forecast 9%

Stabilization of management and sustainable growth

FY2024 net income forecast ¥6.0 billion

Sound financial foundation

Expected equity at the end of FY2024 ¥70.0 billion

Business Model: EPC Business

We engage in engineering (E), procurement (P), and construction (C) for plants with proper management of safety, quality, delivery time, and cost.

Our EPC business involves the engineering, procurement, and construction of widely varying production plants. The keys to success in projects are our engineering technical capabilities that integrate element technologies to design plants, project management capabilities that safeguard safety, quality, delivery time, and cost to bring plants to completion, and global support capabilities that execute projects around the world. Based on TOYO's design drawings, we order equipment from manufacturers, transport it to the project sites, construct the plant, conduct trial operation, and complete the project through handover to the customer, after which we continue to provide operational support and maintenance management. Over a period exceeding six decades, TOYO has built plants in over 60 countries.

E Engineering

Strengths in proprietary technologies and collaboration with licensors worldwide

We engage in design through the integration of chemical, material, machine, electrical, control, architectural, civil engineering, and other elemental technologies. Our patents related to the production technologies at the heart of plant construction are process licenses. We supplement our proprietary technologies through long-running collaborations with the world's leading licensors.

P Procurement

Enhancement of quality and cost competitiveness through our extensive network of manufacturers

We order equipment from manufacturers based on design drawings. We dispatch personnel to manufacturers to manage delivery time and quality, and, following completion, arrange for the transport of the equipment to the plant construction site. Leveraging our extensive network to draw on reliable manufacturers and continually develop new partners, we achieve procurement that is competitive in terms of quality and cost.

C Construction

DX-driven efficient management that spans design to construction

We prepare construction sites and install and assemble equipment brought in from around the world. We manage large amounts of equipment in constrained spaces, leveraging DX to carry forward construction smoothly without the occurrence of idle time or reworking. We carry out planning and construction work integrating all stages from design onward, along with real-time progress management and advanced risk management.

Commissioning

Sharing plant operation know-how with customers to enter the operating stage

Following completion of the plant, we carry out commissioning to confirm that quality and production quantity are achievable as designed. Finally, we explain the know-how required for operation of the plant's complex systems to the customer and conduct handover to complete the project.

Business Model: Non-EPC Business

We engage in licensing and in technical and business consulting, grounded in our knowledge of the EPC business.

We use "non-EPC business" as our collective term for businesses including our intellectual property/license business as a technology licensor, business planning and feasibility study for new plants, business investment and business operation as a manufacturing business operator, PMC/owner's engineering that conducts project management from customers' standpoint, EPsCm as a form of business separate from EPC bulk contracting, performance fee-based and subscription-type business such as energy saving and GHG reduction, and co-creation engineering that constructs value chains spanning basic research to social implementation from the standpoint of partners.

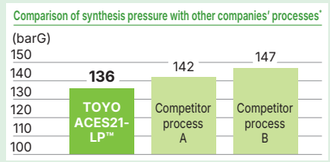
01

Intellectual property/licensing business

TOYO licenses its urea, methanol, and other technologies to customers, and after the completion of facilities provides technical support as a licensor.

TOPICS

Receipt of urea licensing project orders for Indonesian fertilizer plants



Under TOYO's scope of responsibility that covers licensing, basic engineering, partial equipment procurement, and technical services, we engage in service as a urea licensor. We have constructed over 100 urea plants to date and have built up a respected track record of achievements in Indonesia that has resulted in orders. TOYO's new, proprietary ACES21-LP™ technology for low-pressure synthesis of urea is scheduled for its first practical application, where it is expected to reduce plant construction and operating costs as well as save energy.

* Lower pressure reduces energy consumption and thus enables reduction of cost.

P. 64

02

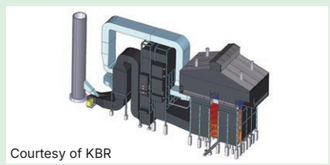
Business Planning and Feasibility Study

In an FS*1, we examine the scale of the plant, the technologies to be adopted, the construction of a supply chain spanning raw material procurement to final products, economic assessment, and other aspects of the business. At the subsequent FEED*2 stage, we engage in basic design that includes estimation of construction costs and assessment of technical issues.

*1 Feasibility Study *2 Front End Engineering Design

TOPICS

Feasibility study for plant producing hydrogen through ammonia cracking



Courtesy of KBR

Ammonia cracking, which breaks down ammonia to extract hydrogen, is a vital technology in the use of ammonia as a hydrogen carrier. In July 2023, TOYO signed a memorandum with KBR on technology for the production of hydrogen through ammonia cracking. With KBR's ammonia cracking technology now at the commercialization stage, TOYO has fielded an increasing number of inquiries, leading to five pre-FS and FS orders in fiscal 2023.

P. 33

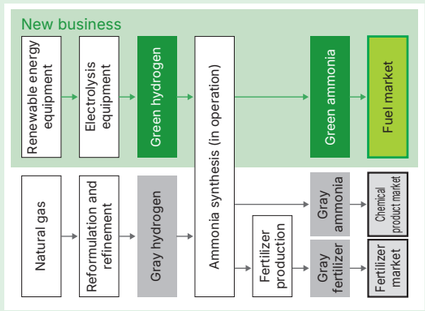
Business Model: Non-EPC Business

03 Business investment and operations

In new business fields, we engage in co-creation with stakeholders to organize projects aimed at a carbon-neutral society, and undertake business investment and operations.

TOPICS

Green ammonia production in Indonesia – Commercialization concept –



This project was adopted by the Ministry of Economy, Trade and Industry as a project under the FY2022 Feasibility Study Project for Overseas Deployment of High Quality Infrastructure (Energy Infrastructure). Together with Indonesia-based fertilizer company Pupuk Indonesia Holding Company, we conducted and completed a feasibility study. The project seeks to realize production of green ammonia at an early stage, using hydrogen from renewable energy-derived electricity while minimizing initial costs and operating costs through effective utilization of the surplus production capacity of existing ammonia plants. Based on the outcomes of the feasibility study, TOYO is now undertaking further commercialization studies as a co-investor.

04 PMC* and owner's engineering

As a member of the customer team, we engage in feasibility studies, business planning, project management, consulting, and so on for plants, drawing on our EPC knowledge.

* Project Management Consultant

TOPICS

PMC services for paraxylene and high-purity terephthalic acid plant for Indian Oil Corporation Ltd. (IOCL) in India

TOYO has performed PMC services for IOCL since March 2019. The target is a project to construct a plant for the production of 1.2 million tons/year of high-purity terephthalic acid (PTA) and a plant for the production of 800,000 tons/year of paraxylene (PX), a raw material for PTA, at the Paradip refinery (300,000 BPD) and petrochemical complex. PTA is a raw material for PET bottles and films and for polyester fiber, for which demand is rapidly growing in India. We began with the creation of the FEED package, proceeded to the bidding and selection process for EPC contractors, and are managing project quality and progress.

05 EPsCm*

Along with engineering, we lead projects to success through support that spans selection of equipment manufacturers and construction companies, material-and-equipment quality and delivery date management, and construction quality and schedule management by the customer.

* Engineering, Procurement support, Construction management

TOPICS

Receipt of order from BASF for a large-scale petrochemical project in China

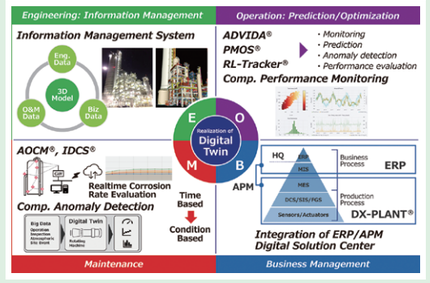
In a large-scale petrochemical complex project planned by Germany-based BASF in China, in fiscal 2022 TOYO received an order for (1) EPsCm services for the acrylic acid plant, (2) PMS services for the ethylene plant, product storage facility, and polyethylene plant, and (3) project management and supervision of the overall plant complex. Since signing a comprehensive engineering partner agreement with BASF in 2013, TOYO has contributed to the company's investments in the Asia-Pacific region, leveraging the strengths of global sites including Toyo-China, Toyo-India, Toyo-Malaysia, Toyo-Korea, IKPT (Indonesia), and TEC Project Services (Japan).

06 Performance fee-based and subscription-type business

We contribute to the improvement of customers' profit through the provision of energy-saving and GHG emission-reducing solutions and by supporting the remote management and operational efficiency of plants through IoT and data analysis technologies.

TOPICS

Identification of room for improvement in Maruzen Petrochemical Co., Ltd. cracking gas compressor power, using the DX-PLANT™ plant operation support service



Under a subscription contract, we provide the DX-PLANT™ plant operation streamlining cloud service to Maruzen Petrochemical Co., Ltd. for ethylene plant use. A study found that, compared to calculated values of compressor power based on conventional design conditions, the cracking gas compressor operational optimization provided by the DX-PLANT™ service yields up to 4% room for improvement in calculated values based on actual operating conditions of DX-PLANT™. The two companies will continue to verify potential improvements and to study the enhancement of plant operational efficiency. DX-PLANT™ is a service that maximizes revenue in customers' plants through total solutions in four areas: (1) E: Information Integrated Management Support Service, (2) O: Operation Support Service, (3) M: Maintenance Support Service, and (4) B: Business Support Service.

Business Model: Non-EPC Business

07

Co-creation engineering

In TOYO's R&D engineering, we have developed customer support services that create pilot projects for technology seeds and scale them up to demonstration projects. As society becomes ever more complex and diversified, it is increasingly important that we leverage TOYO's comprehensive engineering capabilities to form projects through broader and deeper alliances.

In co-creation engineering, TOYO works with companies, universities, and research institutions engaged in research and development of basic technologies and development of new products, collaborating as partners that seek to grow together while tackling solutions to social issues. Throughout the development phase that spans basic research to social implementation, we develop new technologies, products, and businesses by integrating the technologies and knowledge of each partner. Through this, together with our co-creation partners we realize the monetization of developed technologies via intellectual property and licensing, and seek to create sustainable value with an eye toward the future.

Conceptual diagram of co-creation engineering

Co-creation engineering

Partnerships to develop next-generation technologies and to achieve social implementation and commercialization

Companies, universities, and research institutions
Technological areas of expertise
- Seeds
- Basic research
- Ideas

Toyo Engineering Corporation
Comprehensive engineering
- Extensive technical capabilities
- Design of social systems
- Business model construction

Fusion of know-how, technologies, and knowledge

Value creation through the co-creation of intellectual property

Co-creation engineering phase

01 Basic research and laboratory testing

We carry out identification of issues, development of seed technologies, analysis and evaluation of new technologies, etc. Drawing on TOYO's comprehensive engineering perspective, we proceed with analysis and discussion from every angle and execute the initial stages of technology development.

02 R&D Engineering

This is a stage of technology development and design necessary at every stage of research and development, company formation studies, and basic design for new technologies. We engage in commercial-scale image design at an early stage and determine our approaches to solving problems.

* R&D: Research and development

03 Commercialization and social implementation

By incorporating technical features, technical risks, and relevant countermeasures in design, procurement, and construction, we aim for the commercialization of new process technologies in a short time frame. With the cooperation with TOYO's global networks and business partners at home and overseas, we also construct optimal value chains.

Basic research and laboratory testing TRL 1*	Applied research/ component prototyping TRL 2 to 3	Empirical research/pilot TRL 4 to 5	Field demonstrations/ demos TRL 6 to 7	Commercialization and social implementation TRL 8
• Seed technology development • Technology development support • Identification of issues	• Analysis of laboratory test data • Commercial scale design trials • Pilot test planning	• Data collection/analysis • Preparation of basic engineering specifications • Data for economic valuations		• Commercialization • Construction of value chain • Construction of EPC execution

* TRL: Technology Readiness Level, a criterion used to evaluate the level of new technology development

TOPICS

Carbon neutrality through plastic resource recycling

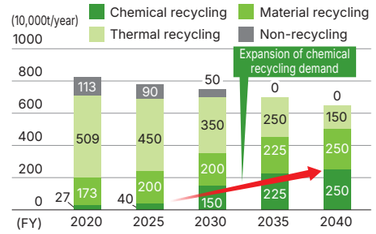
Plastic disposal and dumping are serious issues. We are jointly tackling the development of waste plastic recycling technology!

As a lightweight material with excellent processability, plastic is expected to see increased use in the future. However, most of the plastic produced around the world is discarded, and most collected plastic ends up in landfills or dumped into the ocean, with very little plastic recycled. If social problems such as ocean dumping could be lessened by making waste plastic recycling more efficient and less labor intensive, the result would be a major contribution to society.

With that in mind, TOYO has partnered with Thailand-based Circular Plas Company Limited (CirPlas), which has developed basic technology* capable of producing oil from waste plastics. We launched a co-creation project that spans technology development for a demonstration plant, to social implementation of the technology.

* Core technologies for chemical recycling facilities

Forecast of waste plastic emissions in Japan



Source: Plastic Waste Management Institute. Numbers for 2025 and later are estimates by TOYO, based on plastic resource recycling strategies of the Ministry of the Environment.

Background to co-creation

CirPlas is an affiliate of SCG Chemicals, a Thailand-based major petrochemical company. TOYO has a track record of ethylene plant design and procurement work with SCG Chemicals. To tackle technological development aimed at the social implementation of demonstration plants using CirPlas's technologies for the conversion of mixed waste plastic to oil, we signed a basic agreement on joint studies in January 2022 and signed a joint development agreement on collaboration to expand scale and business opportunities in June 2024.

Promoting a technology development program as a co-creation partner expected to offer comprehensive technology development capabilities

TOYO promoted a technology development program as a co-creation partner expected to offer not only EPC contracting for facilities but also comprehensive technology development capabilities with functions for plant facility process design, equipment design, analysis, and so on. Using demonstration plant operational data and existing equipment specifications provided by CirPlas, the development team in TOYO analyzed process and mechanical technical issues. The development team consisted of teams for process design, analysis, pressure vessels, material handling, and heaters. Through analysis leveraging these teams' expert knowledge, we uncovered problems in both process and mechanical areas and determined countermeasures. As an example, we conducted design spanning basic to detailed stages for the development of a new reactor* with an advanced basic structure for enhanced performance, undertook selection of vendors for manufacture of the reactor, and verified vendors' levels of manufacturing technology. The new reactor will be installed in a demonstration plant scheduled for operation in early 2025, after which performance will be verified with the aim of commercialization. Looking ahead, we will work with CirPlas on the project's next stage of increasing scale to a commercial level and on licensing to third parties.

* Reactor: Equipment that heats liquids and substances to promote decomposition

Takeshi Sato
Mechanical Engineering Division

The competitive advantages of CirPlas' plastic recycling technology

This energy-saving and environmentally friendly process enhances the yield of cracked light oil by using proprietary multi-functional materials to lower the process temperature. By incorporating TOYO's improvement proposals into the demonstration plant, we seek to adapt to changing waste plastic raw materials and enhance continuous operability and production capacity. By recycling plastic wastes into plastic raw materials, the technology will contribute to mitigating plastic waste issues in Thailand and around the world.

Our History of Value Creation

The path that TOYO has pioneered will lead to the realization of a carbon-neutral society

Finding strength in the technical capabilities and global structure that we have honed while addressing social issues that change with the times, we will continue evolving toward further growth and social contribution.

TOYO's history

Movements in the world

Establishment of global networks

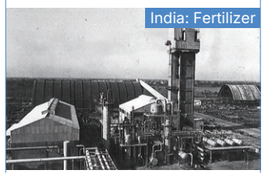
1960
- Era of high growth

Pioneering of overseas markets and establishment of our technological foundation

- Receipt of order for Indian fertilizer plant as our first overseas project
- Start of partnerships with licensors (KBR, Lummus)

1961 Toyo-Japan

Japan: Ethylene


India: Fertilizer

1970 to 1980
- Oil crisis
- Diversification of services and lifestyles

Expansion of business through the honing of our technical capabilities

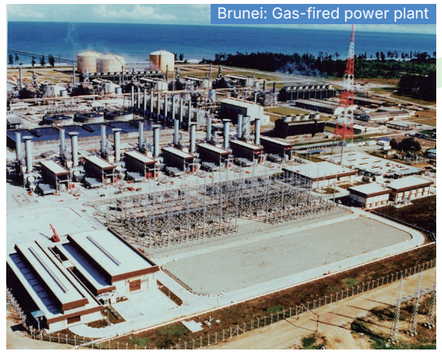
- Successive studies of advanced technologies, and honing of our technical capabilities
- Increase in overseas global networks and construction of global structure

1972 Toyo-Europe

1976 Toyo-India

1986 Toyo-Malaysia, Toyo-USA

1987 Toyo-Korea TPS (Japan)


Brunei: Gas-fired power plant

1990
- Bursting of Japan's economic bubble
- Proliferation of the Internet and personal computers

Diversification of our portfolio

- Diversification of our portfolio into the pharmaceutical and power generation fields, drawing on the technical capabilities and knowledge of our existing businesses
- Deployment of information technologies in the plant enhancement business and industrial systems field

Japan: Active ingredients

Turkey: Enhanced oil recovery

2000
- IT revolution, and bursting of IT bubble
- Lehman Brothers collapse

Toward the Global TOYO structure

- Toward making all global networks autonomous profit centers
- Setting of Mission, Vision, and Values for the Group overall, unification of logos, and strengthening of competitiveness as a group

2004 Toyo-China

Oman: Methanol

2010
- Advance of digitalization
- Adoption of SDGs at United Nations summit

Shift from expansion course

- Thorough review and strengthening of risk management
- Promotion of management reform and corporate culture transformation

2012 IKPT (Indonesia) TSPI (Brazil)

Japan: Mega-solar

2020 to
- Generative AI/data center rush
- COVID-19 pandemic

Endeavors toward the realization of a carbon-neutral society

- Promotion of our Medium-Term Management Plan (2021 to 2025)
- Sustainable growth through our Sustainable Technology and Business Development strategy and Advanced EPC Operation strategy

2022 OFS (Singapore)

Japan: SAF
Courtesy of JAL

Malaysia: Petrochemical complex

Brazil: FPSO

The value accumulated by TOYO will lead to the realization of a carbon-neutral society

- Fuel ammonia
- Synthetic fuels (e-fuel/SAF)
- Waste plastic recycling
- Energy saving and GHG reduction consulting
- Middle molecule pharmaceuticals
- Biopharmaceuticals
- Renewable energy power generation
- Thermal power generation
- CCS, CO_2-EOR
- Methane hydrate
- Rare earths
- Methanol
- Ethylene
- Ammonia
- Urea

SUSTAINABILITY AND STRATEGY

Initiatives for sustainability

In recent years, the international economy and society has faced the shared challenges of climate change response and of balanced sustainable growth. Companies increasingly face demands to contribute to solving the diverse issues outlined in the UN's SDGs*1. TOYO has identified four Materiality (important management issue) aimed at achieving our mission of "Engineering for Sustainable Growth of the Global Community." Under our Sustainability Basic Policy, we will also shoulder our role as an engineering company to sustainably grow together with society.

Based on our belief that business operations and sustainability are inseparably linked, we are promoting a Medium-term Management Plan (FY2021-FY2025) focused on our "green and blue strategies" of Sustainable Technology and Business Development and Advanced EPC Operation.

We are implementing initiatives to enhance our accumulated technical capabilities, knowledge, and experience as we pursue the development of fuel ammonia, hydrogen, synthetic fuel, and other next-generation energy sources, along with energy-saving plants and low-environmental-impact/circular technologies to address waste plastics and other issues in order to achieve an (1) environmentally friendly society; and contribute to solving food problems in fertilizers and other fields, securing stable energy for transitions and strengthening the foundation for daily living through high-performance materials and other technologies in order to (2) enrich people's lives.

In the area of sustainability, we recognize that addressing climate change is an issue of particular importance. In addition to carrying out the above initiatives, in November 2021 we expressed our endorsement of the TCFD*2 recommendations, and in June 2022 conducted disclosure and announcements in line with the recommendations. As part of our efforts to contribute to international implementation of the Paris Agreement, we have established targets of reducing our own greenhouse gas (GHG) emissions by 30% by 2030 (compared to 2021) and achieving net zero emissions by 2050.

Under the recognition that achieving the above strategies will demand not only our accumulated knowledge and experience but also the securing and training of human resources possessing diverse backgrounds and know-how, we deem human resources our most important business resource as we aim to be an organization where (3) "people of diverse backgrounds engage in active, meaningful work" through our pursuit of diversity, preparation of work environments, hiring activities, human resources training, and other initiatives.

TOYO has established a Code of Conduct that forms a cornerstone of our business operations as we strive to maintain and improve our (4) integrity. We signed the UN Global Compact (UNGC)*3 in December 2021 and conduct management in line with the compact's Ten Principles involving human rights, labor, the environment, and anti-corruption.

In the area of business and human rights, we view respect for the human rights of all people affected by our global business activities as a foundation of our operations. Under that recognition, we established our Basic Policy on Human Rights in June 2023 and our Basic Policy on Business Transactions in October 2023, and are working to strengthen initiatives based on our implementation of human rights due diligence.

To oversee our Group-wide sustainability initiatives, in November 2021 we established the Sustainability Committee as an advisory body to the Executive Committee. The Sustainability Committee plans, promotes, and monitors initiatives under appropriate supervision by the Board of Directors. Under this committee, we have further established subcommittees in the areas of the environment and human rights. These engage in initiatives in collaboration with Operation Units and Group companies.

As an organization that possesses integrity by which people of diverse backgrounds engage in active, meaningful work, TOYO will fulfill its duties as an engineering company drawing on the trust of society and stakeholders, while sustainably enhancing our corporate value and contributing to the sustainable advancement of the international economy and society.

*1) Sustainable Development Goals
*2) Task Force on Climate-related Financial Disclosures
*3) United Nations Global Compact

Click here for our Sustainability Basic Policy

The relationship between our materialities and our Medium-term Management Plan

3 The synergies of the two strategies in 2 yield a positive spiral that achieves the two materialities "Aim to realize an environmentally friendly society" and "Enrich people's lives."

2 We will acquire new business opportunities with the support of our policies for achieving carbon neutrality by 2050 under the Sustainable Technology and Business Development strategy in our Medium-term Management Plan, and will secure outstanding quality and high profit under our Advanced EPC Operation strategy.

1 Among TOYO's materialities, "People of diverse backgrounds engage in active, meaningful work" and "Establish an organization with integrity and discipline" form cornerstones of our corporate activities. The human resource capabilities and the credibility that result from those become driving forces for our Medium-term Management Plan.

4 We will produce outcomes that make our customers feel "TOYO is the best partner" and benefit society. This will lead to increased in business sustainability and employee job satisfaction, resulting in a virtuous cycle that epitomizes our slogan "*Your Success, Our Pride.*"

Sustainability Roadmap

	through FY2023 (results)	FY2024	FY2025	FY2026 onward
	Current Medium-term Management Plan			Next Medium-term Management Plan
Overall	● Formulation of materialities ● Sustainability Basic Policy ● Sustainability promotion system ● External evaluations, etc.	● ISSB/SSBJ tracking	● Review of materialities ● Acquisition of rating (trust/ESG) ● Examination of third-party guarantees	**Further advance initiatives to date in FY2024 to FY2025, and incorporate them into the next Medium-term Management Plan**
Human rights, etc.	● Statement of UNGC endorsement/participation ● Basic Policy on Human Rights/Basic Policy on Business Transactions ● Participation in the Human Consortium ● Engagement surveys, etc.	● Enhancement of disclosure of human capital investment (including D&I) ● Human rights/SC due diligence	● Enhancement of human rights/SC due diligence	
Environment	● Statement of TCFD endorsement/disclosure ● Scope 1 and 2 disclosure ● CN statement ● Participation in the GX League, etc.	● Acquisition of CDP evaluation ● Enhancement of Scope 1 and 2 disclosure ● Climate Change Transition Plan ● External certification of emissions, etc.	● Enhancement of Scope 1, 2, and 3 disclosure	

Sustainability promotion system

Materiality (important management issue)

MATERIALITY

Mission

Engineering for Sustainable Growth of the Global Community

Materiality (important management issue)	Priority areas	Risks and opportunities/actions	KPIs and results

Environment

Aim to realize an environmentally friendly society

- Pursuit of low-environmental-impact plants
- Contribution to the achievement of the circular economy
- Pursuit of next-generation energy

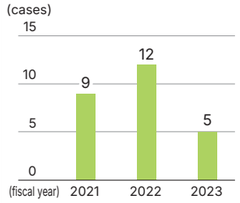
Risks

- Loss of business opportunities and decline in corporate value due to delayed action on technological development aimed at carbon neutrality, low environmental impact, and the future circular economy
- Hindered execution of plant construction as a result of increasingly frequent and severe natural disasters caused by abnormal weather conditions

Opportunities/actions

- Innovations in environmentally friendly technology related to global warming prevention and waste recycling, and appearance of new business opportunities using these
- Increase in business opportunities related to carbon neutrality and the circular economy under a growing need for decarbonization and a circular economy

Climate change risks and opportunities P. 45

Details of KPIs	FY2023 results (cumulative)	FY2021 to FY2023 results	Description
Cumulative number of orders and business investment cases since FY2021	5 cases (26 cases)		Examples of projects: Liquefied hydrogen value chain CO_2 capture Geothermal power plants Energy saving and GHG reduction services

Social

Enrich people's lives

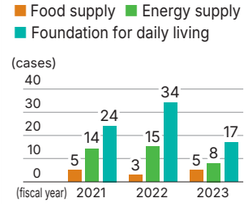
- Contribution to energy security, strengthening of foundation for daily living, and resolution of food problems
- Technology transfer and the strengthening of industrial infrastructure through business execution

Risks

- Market access restrictions, supply shortages, and supply chain problems due to increased regionalism and other factors; more severe low-price competition due to delayed technological innovation, etc.
- Stagnant demand for new plant construction as a result of insufficient funds and political instability caused by weak industrial infrastructure in emerging countries

Opportunities/actions

- Increase in business opportunities related to securing the food, energy, etc. essential to daily life
- Expansion and smooth execution of local business through the utilization and training of talented local human resources in harmony with communities
- Creation of new business opportunities through technology transfer and job creation involving plant construction

Details of KPIs	FY2023 results (cumulative)	FY2021 to FY2023 results	Description
Cumulative number of orders and business investment cases since FY2021 **Food supply** **Energy supply** **Foundation for daily living**	5 cases (13 cases) 8 cases (37 cases) 17 cases (75 cases)		Examples of projects: ● Food supply Fertilizer plants ● Energy supply Geothermal power generation and oil refining plants ● Foundation for daily living Ethylene and pharmaceutical plants

Social

People of diverse backgrounds engage in active, meaningful work

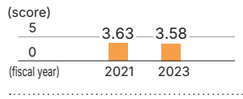
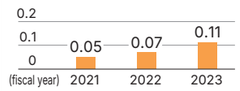
- Training and development of human resources
- Promotion of inclusion
- Enhancement of worklife balance
- Promotion of health management and enhancement of occupational safety and health

Risks

- Outflow of talented human resources and decline in technical capabilities, competitiveness, labor productivity, and motivation if failing to take suitable action
- Business continuity risks and the loss of trust from customers and communities due to occupational accidents

Opportunities/actions

- Continued development via in-house communication of our Medium-term Management Plan strategy through employee retention
- Increased business creation opportunities through technological innovation and the maintenance and enhancement of our competitiveness, as a result of taking appropriate actions to secure talented human resources and boost both labor productivity and motivation

Details of KPIs	FY2023 results	FY2021 to FY2023 results	Description
Rating of employees' engagement survey	3.58 (out of 5)		FY2023 results (every two years)
Lost time incident rate (LTIR) = total lost time incidents x 1,000,000 / man-hours	0.11		Exceeds KPI of 0.1 or less

Governance

Establish an organization with integrity and discipline

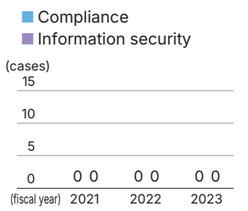
- Corporate Governance
- Compliance

Risks

- Business continuity risks caused by compliance failure and information security incidents
- Risks of major losses and business continuity risks caused by corporate governance failure

Opportunities/actions

- Construction of a stable, resilient business execution foundation based on prompt, highly transparent decision-making under a solid governance system

Details of KPIs	FY2023 results	FY2021 to FY2023 results	Description
Number of serious violations of compliance*1	0		Continuation of 0 cases since start of Medium-term Management Plan in FY2021
Number of major information security incidents	0		*1 Number of cases of whistleblowing P. 82

Materiality (important management issue) identification process

Using the process shown at right, TOYO identified four materialities to be tackled as priorities. We are acting on these based on deliberations and decisions made at management meetings and by the Board of Directors.

- STEP 0: Analysis of the UN's SDGs, global trends, etc., and assessment of TOYO's unique contributions and competences
- STEP 1: Identification of materialities related to sustainability
- STEP 2: Assessment based on importance, priority, and timeline from the perspective of stakeholders
- STEP 3: Assessment based on importance, priority, and timeline from the perspective of TOYO
- STEP 4: Identification of materialities through comprehensive assessment

Overview of the Medium-term Management Plan (2021 to 2025)

Realize sustainable growth through the double spiral of Sustainable Technology and Business Development and Advanced EPC Operation

Sustainable Technology and Business Development strategy

Priority Areas:
Environment and Energy
Co-creation with customers/ partners from the conception stage

Transformation of our business portfolio. Enhancement of profitability and securing of stability and sustainability in future business.

Return new knowledge and business opportunities to EPC

SUSTAINABLE DEVELOPMENT GOALS

Invest knowledge, experience, and profit gained through EPC

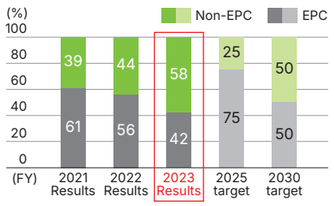
Advanced EPC Operation strategy

Group operations
×
DXoT (Digitalization without sanctuary)
▼
Ensuring Excellent Quality and Profitability

Pillar of profit until new businesses contribute to profit. Ensure stability and reliability of management.

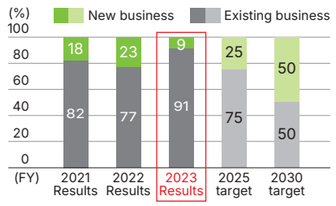
KPI

Non-EPC gross profit composition



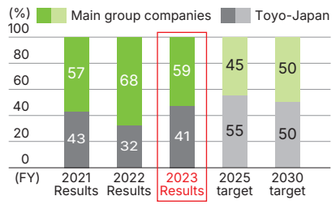
We will enhance profitability and ensure business stability by increasing the percentage of low-volatility, high-profit-margin non-EPC projects.

Gross profit composition of new businesses



We will transform our portfolio through the monetization of new businesses with a focus on carbon neutrality, and will enhance profitability and ensure business sustainability.

Gross profit composition of main group companies



Under thorough risk management, we will boost profit in a balanced manner at Toyo-Japan and main group companies in Japan and overseas to ensure stability and reliability in management.

Other KPIs

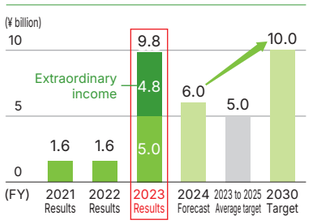
	Target	FY2023 Results
Employee satisfaction	Improved from previous survey	FY2023: 3.58 (out of 5) Same level as FY2021 (3.63)
Number of employees	**Toyo-Japan** Doubling of number of human resources in new technology and business development from 110 persons	Current: about 130
	Group companies Increase/decrease in line with demand	Total in Group: about 7,000

KGI

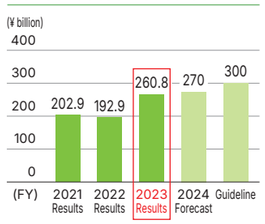
Progress towards achieving KGIs

In fiscal 2023, net income on a core business basis was 5 billion yen (excluding 4.8 billion in extraordinary income from the sale of real estate). Net sales and net income both increased from the previous year. Net income for fiscal 2024 is expected to increase to 6 billion yen. ROE on a core business base was 9.3%, and is expected to be 9% in fiscal 2024, and progressing smoothly toward our target of 10%. In fiscal 2023, we achieved our KGI of paying a dividend for the first time in seven years. We expect to pay a dividend of 25 yen in fiscal 2024, under a dividend payout ratio of 25% in principle.

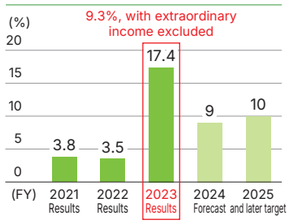
Consolidated net income



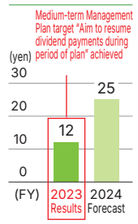
Consolidated net sales



ROE



Dividend*



*Dividend per share

Status of initiatives to achieve the goals of our Medium-term Management Plan

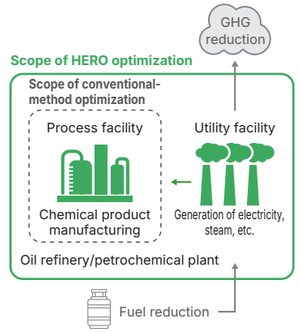
To stabilize profit, we are undertaking conversion of our business portfolio to carbon-neutral/non-EPC projects. We are also working toward profit improvement by capturing strategic orders through customer-focused sales and by raising the level of project management through DX.

Sustainable Technology and Business Development strategy

Securing stable profit through non-EPC projects

- We received an order for a project involving the HERO energy saving/GHG reduction service. We aim to progress from FS* to the stage of providing engineering packages and receiving performance- based compensation.
- We provided Solar carports using TOYO's proprietary technologies and services.

*Feasibility Study



Sustainable Technology and Business Development strategy/Advanced EPC Operation strategy

Selective receipt of orders for high-profit-margin, low-risk, high-quality projects

- We received multiple orders for urea license contracts. We plan to apply our state-of-the-art ACES21-LP™ to projects in Indonesia.
- The Business Portfolio Committee uses DX tools to carry out reviews of Company-wide resource allocation and scenario setting, and engages in rational decision-making on projects aimed at receipt of orders.

Existing ACES21™ urea plant in Indonesia

Advanced EPC Operation strategy

Receipt of orders for medium-scale, high-quality projects in countries with group companies

- Gas-fired power generation in Indonesia
- Petrochemical project in South Korea
- Oil-related project in India

Signing ceremony for gas-fired power generation contract with Indonesia-based PT Energi Listrik Batam

Sustainable Technology and Business Development strategy

Promotion of carbon neutral, circular, and low-environmental-impact projects

- We carried out five pre-FS and FS projects for hydrogen production through ammonia cracking.
- We signed a four-company* JV agreement on the efficient promotion of FEED involving the liquefied hydrogen supply chain.
- We completed a PET bottle recycling plant to process used PET bottles.

* Toyo Engineering Corporation, Kawasaki Heavy Industries, Ltd., JGC Corporation, Chiyoda Corporation

Exterior of PET bottle recycling plant, Circular Pet Co., Ltd.

Advanced EPC Operation strategy

Receipt and execution of multiple large-scale FPSO orders

- Through the establishment of a joint venture with MODEC, Inc., in fiscal 2023 we won two orders for major projects (ExxonMobil, Equinor) that are now progressing smoothly.
- We are providing FEED services for a new project for Shell In Brazil.

Uaru FPSO off the coast of Guyana

Raia FPSO off the coast of Brazil

Human resources strategy at the Group-wide level

Strengthening mid-career recruitment and realizing new work styles

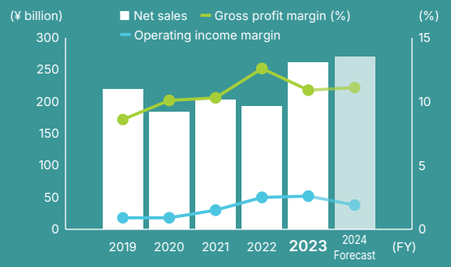
- We welcomed 38 mid-career hires in fiscal 2023, further boosting our workforce.
- We decided to relocate the Head Office to achieve new work styles in an environment that will let us maximize the mobility and solidarity of teams, along with the professionalism of individual employees.

Makuhari Technical Center, Chiba

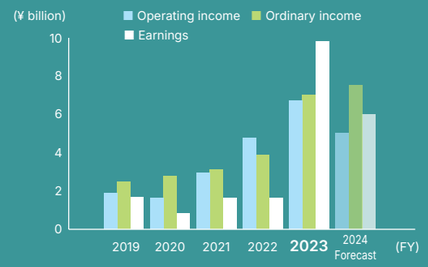
Financial Highlights

See “Ten-Year Financial Highlights” on P. 89

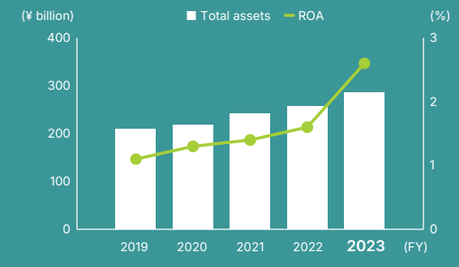
Net sales, gross profit margin, operating income margin



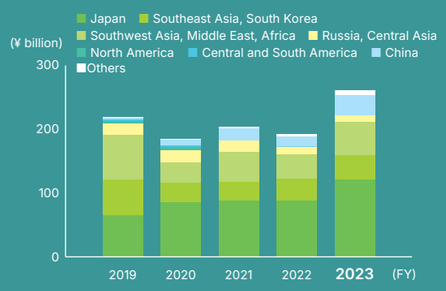
Operating income, ordinary income, earnings



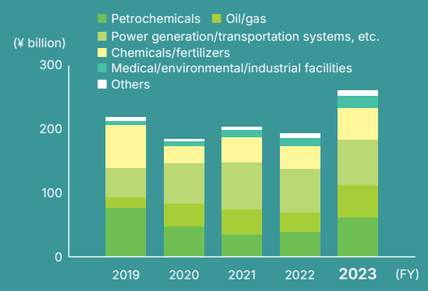
Net assets and return on assets (ROA)



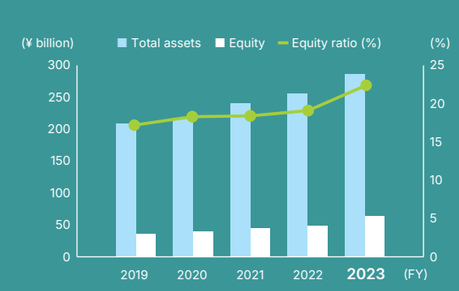
Net sales by region



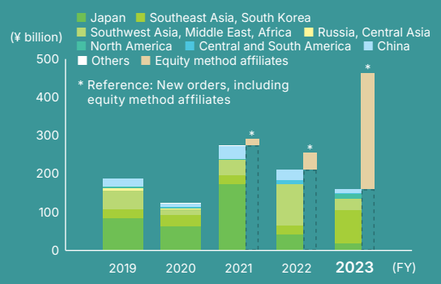
Net sales by product



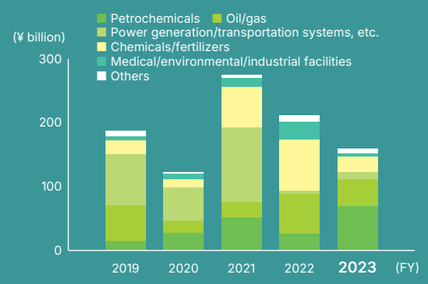
Total assets, equity, equity ratio



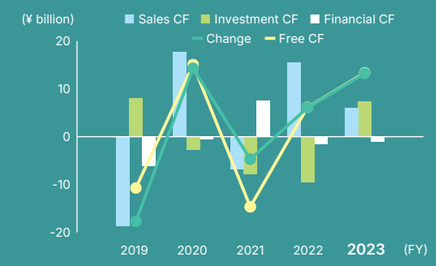
New orders by region



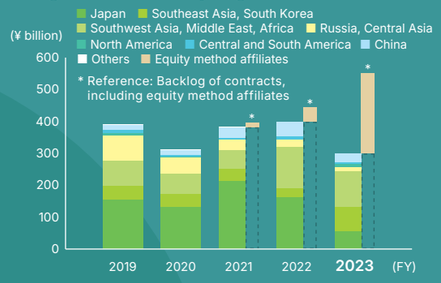
New orders by product



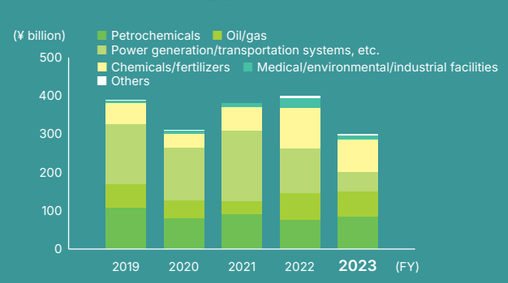
Cash flows



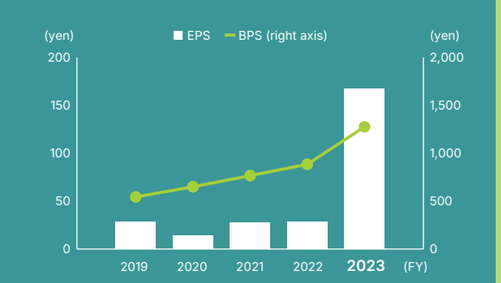
Backlog of contracts by region



Backlog of contracts by product



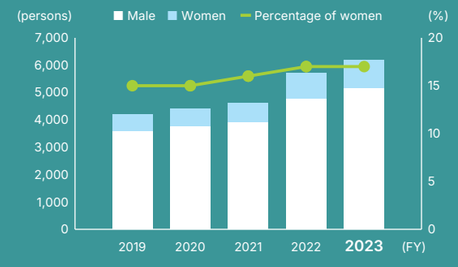
Earnings per share (EPS) and book value per share (BPS)



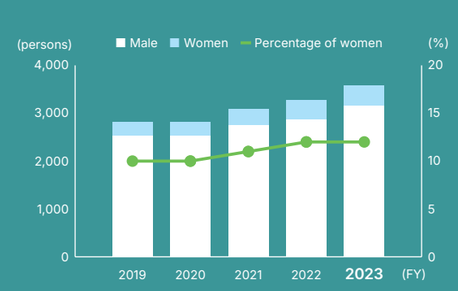
Non-Financial Highlights

See “ESG Data” on P. 91

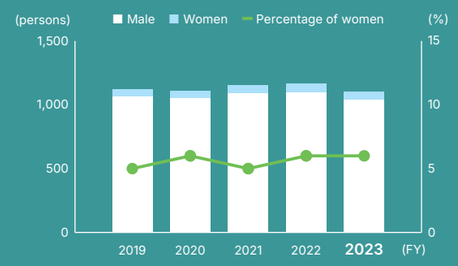
Number of employees (consolidated)



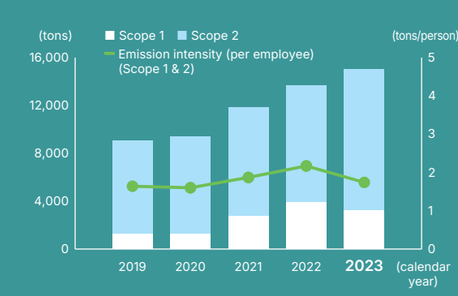
Number of engineers (consolidated)



Number of managers (consolidated)



GHG emissions for TOYO Group overall (Scope 1, 2)



Message from the CFO

Leveraging Profits from Existing Businesses to Fuel New Business Expansion

In fiscal 2023, our net sales reached ¥260.8 billion, operating income was ¥6.7 billion, and net income totaled ¥9.8 billion. Shareholders' equity increased by ¥14.9 billion from the previous fiscal year, amounting to ¥63.9 billion. We made the strategic decision to relocate our Head Office to strengthen our financial foundation and introduce new work styles, which resulted in extraordinary income from the sale of real estate. Excluding this one-time income, net income from core business activities was ¥5.0 billion—up ¥3.4 billion from ¥1.6 billion the previous year, marking our highest level since fiscal 2019. This strong performance was driven by smooth project progress in India and China, contributions from non-EPC projects, and two large-scale FPSO (Floating Production, Storage, and Offloading) projects executed by our Singapore-based affiliate, OFS.

The FPSO market is expected to experience robust investment demand for the next decade, and given the limited number of market players, we foresee significant opportunities for further business growth in this area. In terms of the broader market environment, while supply and demand in petrochemical products are stabilizing, capital investment remains strong in high-performance chemicals and decarbonization initiatives, with large-scale projects on the horizon.

For projects that carry significant risk, we conduct thorough screenings to select high-quality opportunities. Additionally, we are focusing on increasing orders for service-based products, such as licensing and FEED (Front End Engineering Design), which offer limited risk and high profitability. By utilizing our extensive domestic and international EPC networks, built over many years, we are diversifying revenue streams and mitigating risks. This regionally distributed business model has led to a growing contribution from our overseas networks, aligning with our strategy of localized production for localized consumption.

As part of our Medium-term Management Plan, the expansion of non-EPC businesses and the growth of global network profits have been established as key KPIs. Our strategic efforts in these areas have yielded positive results, allowing us to resume dividend payments in fiscal year 2024, the first since fiscal 2017.

Looking ahead to fiscal 2024, we anticipate net sales of ¥270.0 billion and net income of ¥6.0 billion—a 20% increase in core business profit compared to the ¥5.0 billion achieved in fiscal 2023 (excluding extraordinary income). In terms of new business fields, we have transitioned from the planning stage to fully monetizing these ventures. By reinvesting profits from existing businesses into new growth areas, we aim to achieve net income of ¥10.0 billion from core business operations by fiscal 2030.

See "Financial Data" on P. 29 and P. 89

Kensuke Waki
Director, Senior Executive Officer,
Chief Financial Officer (CFO)

Capital Cost-Conscious Management with Aiming for ROE of 10% and PBR of 1.0 or Higher Targeting Shareholders' Equity of ¥75 Billion and an Equity Ratio of 25% or Higher, with a Dividend Payout Ratio of 25%

Currently, our cost of shareholders' equity is approximately 7% to 8% based on the CAPM model. Over the past few years, our ROE (return on equity) has fluctuated between 2.2% and 9.3%, from fiscal 2019 to fiscal 2023, while our PBR (price-to-book ratio) has remained below 1.0 since fiscal 2021.

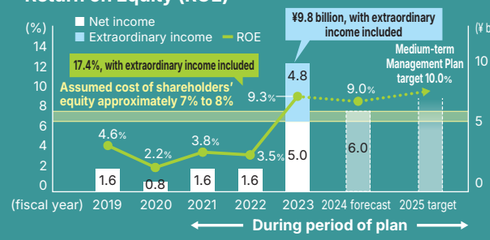
As an international EPC contractor, we recognize the need to restore shareholders' equity, which has been eroded by past losses, to at least ¥75 billion and to achieve an equity ratio of 25% or higher. Based on this foundation, we aim to achieve an ROE that exceeds the cost of shareholders' equity, targeting 10% or higher by fiscal 2025. This will require us to generate net income of approximately ¥7.5 billion.

Operating cash flow in fiscal 2023 was ¥6.0 billion, a decrease of ¥9.5 billion from the previous year, as we worked to eliminate project funds that were temporarily accumulated in the prior fiscal year. Despite this, our cash and deposits increased by ¥13.2 billion year-on-year to ¥119.8 billion, mainly due to an increase in investment cash flow of ¥7.3 billion, including income from real estate sales. After adjusting for project-related temporary cash inflows, our actual cash balance is roughly ¥75 billion. For an EPC company, this equates to approximately 2.5 months of annual net sales—a generally accepted benchmark for a safe cash reserve level. When factoring in future forward-looking investments and borrowing, we consider this an appropriate reserve level.

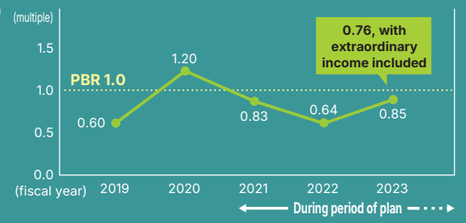
Our focus now is on further growing profitability, which saw significant improvement in fiscal 2023. Key initiatives include strengthening risk management both before and after receiving orders, careful project selection, expanding orders for non-EPC projects that carry lower risk and higher profitability, enhancing productivity and loss prevention through DX implementation, and diversifying profit sources across Toyo-Japan and our major domestic and international global networks. Additionally, we are working toward monetizing carbon neutrality initiatives and other new business ventures.

Our current shareholder return policy sets a dividend payout ratio of 25% as a general principle. We expect to pay a dividend of ¥25 per share for fiscal 2024. By clarifying our medium- and long-term vision and enriching our information disclosures, briefings, and dialogues with the stock market, we aim to foster further growth expectations and target a PBR of 1.0 or higher.

Return on Equity (ROE)



PBR

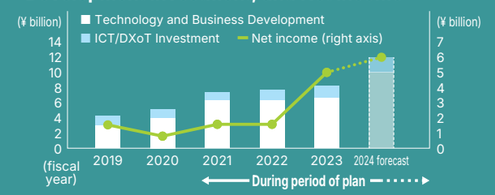


A Growth Strategy Focused on Reaping Returns from Investments

Since fiscal 2021, the starting year of our Medium-term Management Plan, we have steadily increased growth-oriented investments. A significant portion of these investments has been directed towards DXoT (Digital Transformation of TOYO). Through fiscal 2023, the third year of the plan, we have seen tangible results from our efforts to enhance gross profit in the early investment stages. These results have been driven by improving work efficiency, optimizing EPC construction, proactively managing risks through more advanced cost and schedule management, and passing these benefits on to customers. Moving forward, we will significantly expand projects applying DXoT as we move into the phase of fully reaping the returns from these investments.

As an engineering company, we invest in a wide range of technological developments, covering elemental technologies, enhancements to existing product technologies, and new product innovations. Particularly in the area of new product technologies, multiple in-house departments involved in new business promotion actively participate in discussions, with oversight from our Technical Strategy Committee. In addition to our core EPC contracting business, we are exploring investments in the fuel ammonia supply chain, geothermal carbon-neutral park conversions, and solar carports utilizing parking spaces at convenience stores and other roadside retail locations. These initiatives are key steps toward future commercialization.

ICT/DXoT, Technology and Business Development Investment, and Net Income



* Net income for FY2023 is shown as 5 billion yen based on core business. ¥9.8 billion, with extraordinary income include.

Sustainable Technology and Business Development Strategy

Setting circular/environmental impact, CO_2 utilization/energy saving, next-generation energy, resource and energy security, and quality of life as priority areas, TOYO is drawing on our knowledge, technologies, and experience built up the EPC business to tackle Sustainable Technology and Business Development. Six initiatives are introduced below.

1 Initiatives for the use of ammonia as a fuel

Realization of a carbon-neutral society through social implementation of the fuel ammonia value chain

TOYO is working to build a value chain for fuel ammonia as a clean fuel that does not emit CO_2. Ammonia is coming under attention as a fuel for use in thermal power plants, ships, and naphtha crackers. Hydrogen obtained through ammonia cracking is also expected to accelerate the social implementation of hydrogen energy, including application of the energy source in power generation and fuel cell vehicles (FCVs).

Alliance with KBR

TOYO has established a collaborative structure of over 50 years with KBR. The companies boast extensive technical knowledge and a track record of 87 ammonia projects around the world. Against this background of years of collaborative results and a deep relationship of trust, the two companies will promote the commercialization of hydrogen production using ammonia cracking technology to provide sustainable energy solutions.

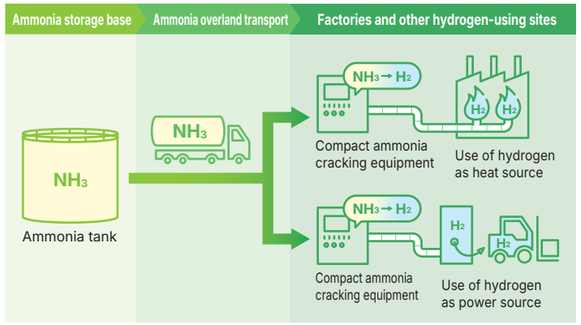
- 80-year track record of engineering since 1943
- Approx. 50% market share
- Leading licensor of ammonia processes

KBR Ammonia performance — **TOYO** Ammonia performance

- Strategic alliance with KBR since 1968
- Track record of 87 ammonia projects
- Leading contractor for ammonia plants

Toward the stable operation and practical application of hydrogen production equipment using ammonia cracking

In April 2024, TOYO, Nippon Seisen Co., Ltd., Chubu Electric Power Co.,Inc., and Chubu Electric Power Miraiz Co., Inc. signed a memorandum of understanding aimed at the practical application of compact ammonia cracking equipment for producing hydrogen from ammonia. The compact equipment is expected to see on-site industrial use in factories and other locations. In June 2024, TOYO and JERA Co., Inc. submitted an application to Japan's New Energy and Industrial Technology Development Organization (NEDO), resulting in its adoption as an "International Demonstration Project on Japan's Technologies for Decarbonization and Energy Transition." This study of demonstration requirement conformity will seek to investigate methods of hydrogen supply and potential for its proliferation in industrial use in Thailand, and to verify ammonia cracking technology and optimal design methods for hydrogen storage facilities overall.

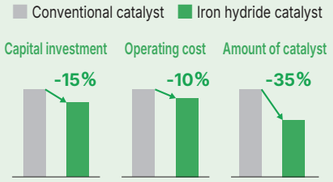


Development of next-generation ammonia synthesis catalyst

TOYO is working with Tokyo Institute of Technology, Ammon Fields Inc., and F.C.C. Co., Ltd. (FCC) on commercial development for the application of iron hydride catalysts to production systems for fuel ammonia. The catalysts significantly lower the conventional high-temperature, high-pressure conditions required for ammonia synthesis, saving energy and reducing CO_2. This initiative is expected to yield the social implementation of energy-saving, low-cost production technology for fuel ammonia.

Innovative catalyst: Iron hydride catalyst

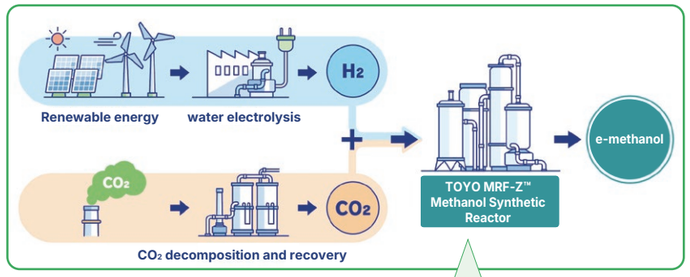
This new catalyst, a compound of metal hydride and iron, facilitates the process of cracking nitrogen molecules into nitrogen atoms. By using no rare precious metals, it offers advantages in terms of economy and stable supply.



2 Initiatives aimed at the social implementation of our g-Methanol™ synthetic fuel

Clean methanol synthesis from CO_2 and renewable energy-based hydrogen

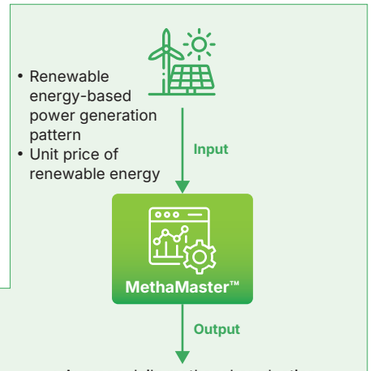
Methanol is attracting attention as a fuel, primarily in the marine transport industry. Leveraging our experience in the synthesis of methanol derived from fossil fuels, TOYO is undertaking the synthesis of clean methanol produced from CO_2 and renewable energy-based hydrogen. We are drawing on the strength of our proprietary MRF-Z™ methanol synthetic reactor to continue tackling the challenges of plant engineering and operation under the variable conditions of renewable energy.



Our MRF-Z™ Reactor proprietary synthetic reactor and MethaMaster™ facility planning optimization software

TOYO's proprietary MRF-Z™ synthetic reactor minimizes the amount of catalyst through efficient removal of reaction heat.

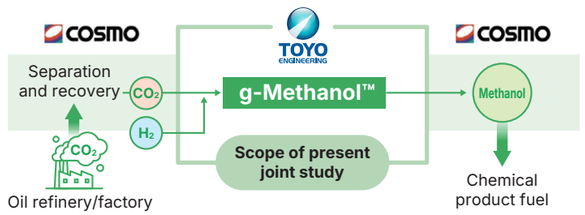
The amount of electric power generated from renewable energy sources varies with time of day and weather conditions. Accordingly, plant equipment capable of adapting to a varying energy supply must be considered. TOYO has developed MethaMaster™ software that uses data on the renewable energy-based power generation patterns unique to every project to dynamically analyze optimization studies of plant equipment configuration and the capabilities of water electrolysis equipment, storage batteries, hydrogen holders, and other equipment, achieving higher-level production of deliverables in feasibility studies and initial engineering.



*1 Levelized Cost of Methanol: Covers total costs incurred across plant life cycle, including construction and operating costs.

Launch of joint study with Cosmo Energy Holdings, which produces methanol from CO_2 generated in refineries, etc.

TOYO and Cosmo Energy Holdings have concluded a basic agreement on a joint study of g-Methanol™, aimed at producing sustainable products derived from CO_2 generated by Cosmo Energy Group's refineries. The companies have begun studying the CO_2 reduction effects and investment viability of the technology.



As part of Cosmo Energy Holdings' Vision 2030, which includes the initiative of "Strengthen competitiveness of our Oil Business and pursue low carbonization," TOYO will engage in it to realize its mission of "Engineering for Sustainable Growth of the Global Community" by promoting the social implementation of our proprietary g-Methanol™ technology.

Technical licensing initiative for Indian state-run firm NTPC

g-Methanol™ is drawing inquiries from around the world. Particularly in India, where TOYO has engaged in business for many years, the technology has become highly competitive due to declining renewable energy costs, the main component of manufacturing costs. In 2021, we licensed g-Methanol™ technology to Indian state-run firm NTPC for a project to synthesize methanol from the CO_2 and hydrogen emitted from thermal power plants, with delivery of the reactor in February 2023.

g-Methanol™ plant

3 Advanced pharmaceutical plants

Over 30 years of experience and know-how in the medical and fine chemical EPC business

The varied requirements for facilities in pharmaceutical plants are prescribed by GMP*1 and validation*2 is required to ensure that the requirements are met. Manufacturing plants are located inside buildings, with which they are complexly intertwined. Biopharmaceutical plants face extremely high-level requirements for quality, speed, flexibility, stable supply, and low cost, limiting the number of companies able to undertake EPC for these. Drawing on our knowledge from over 30 years in EPC projects involving pharmaceuticals and fine chemicals, our Company achieves high customer satisfaction.

*1 Good Manufacturing Practice: Standards for manufacturing management and quality control
*2 Validation: Verification of the structural facilities, procedures, processes, and other manufacturing management and quality control methods of a manufacturing site

Expanding market for biopharmaceuticals (antibodies, ADCs, mRNA, cell therapy)

The pharmaceutical market is undergoing a shift from small molecule pharmaceuticals to biopharmaceuticals. New modalities (treatment methods) such as cell therapy, ADCs*3 in which drugs are bound to antibodies, and mRNA, which has come under attention with COVID-19 vaccines, are being born. The scale of facilities is also growing, making TOYO's project management capabilities all the more important. Domestic capital investment in pharmaceutical plants has expanded from 350 billion yen in 2018 to 700 billion yen in 2022, and is expected to grow further.

*3 Antibody Drug Conjugates: drugs that combine antibodies used in molecularly targeted drugs and small molecule pharmaceuticals such as cytotoxic anticancer drugs.

Using patented technology to meet customers' high requirements

Facility and operational requirements of customers

Minimize human error at the manufacturing stage	Prevent pollution and degradation of quality	Construct a system that guarantees high-level quality

+

The production of biopharmaceuticals makes use of biological functions of organisms (microorganisms, animal cells, etc.), demanding strict controls to prevent biological contamination from bacteria, viruses, and so on.

↓

Our Company's points of differentiation

Project management capabilities that meet the quality, cost, and delivery time demands of customers

Patented technology that supports the automation of increasingly-demanded single-use facilities

Single-use facilities in manufacturing use plastic bags and tubes instead of stainless steel culturing tanks and pipes to reduce initial investment, enabling the reduction of CIP*1/SIP*2 processes and the increase of production volume. However, the method carries demerits in that overall automation is difficult even when individual items of equipment are automated, and human manual operation increases. In response, we developed automatic pinch valves and tube clamps, elemental technologies required for equipment automation. We developed and patented automation apparatus for the virus inactivation process required in antibody drug manufacturing, and have introduced it at four plants.

Single-use automation elemental technology development (intellectual property creation strategy)

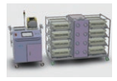
Patent
Automatic pinch valve

Patent
Tube clamp

Single-use automation module apparatus development

Patent
Automated virus inactivation system

Patent pending
Filling module



*1 Cleaning in Place, a system that automatically cleans the interior of apparatus without disassembly by using cleaning agents, etc.
*2 Sterilization in Place, a system that sterilizes apparatus at 121°C or higher for 15 minutes or longer

TOPICS

Receipt of the 2024 Facility of the Year Award from the International Society for Pharmaceutical Engineering

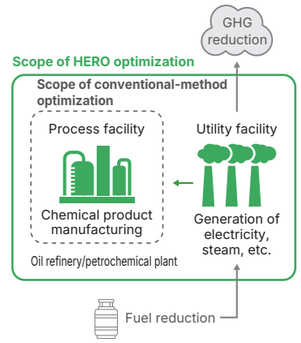
Working under TAISEI Corporation, TOYO subsidiary TEC Project Services led the engineering and construction of biopharmaceutical active ingredient production facilities for Chugai Pharmaceutical Co., Ltd. The biopharmaceutical active ingredient manufacturing building (UK4) of the facilities won the 2024 Facility of the Year Award (Social Impact Category) from the International Society for Pharmaceutical Engineering.

4 HERO/*SUPERHIDIC*™ services for plant energy saving and GHG reduction

Technology and business consulting services aimed at the realization of a carbon-neutral society

Through the HERO service that realizes energy saving and GHG emissions reduction in plants and the and the ***SUPERHIDIC***™ energy-saving distillation system, TOYO is contributing to the realization of a carbon-neutral society. HERO uses mathematical optimization technology for utility facilities overall to create optimal modification plans that consider enormous operating and design condition impacts.

SUPERHIDIC™ reduces energy required for distillation and separation operations by over 50%. It also enables the electrification of energy sources. We expect a market size of about 3.4 trillion yen for HERO and 2.7 trillion yen for ***SUPERHIDIC***™ (including CO_2 reduction benefits), totaling over 6 trillion yen.



Process facility

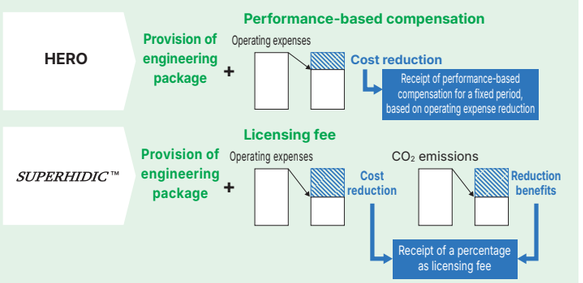
A facility that reacts raw materials, separates the reaction products, and manufactures products that meet requirements.

Utility facility

Facilities that generate heat (steam and heating furnace combustion heat) and power (electricity, etc.) necessary for chemical processes.

Performance fee-based and licensing-type business model

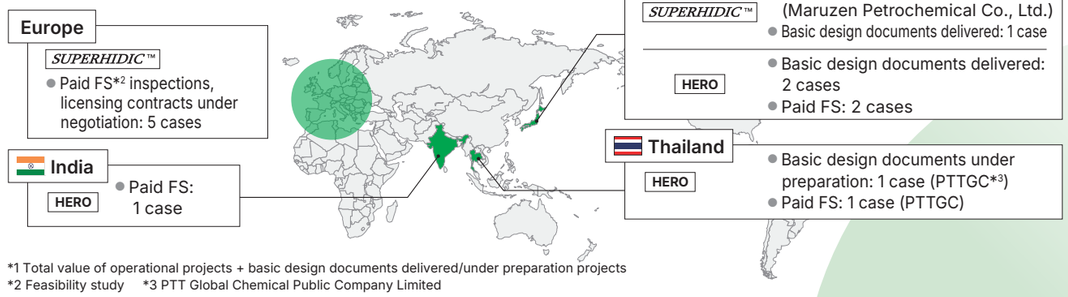
HERO is offered under a business model of paid consulting based on reduced operating expenses, and ***SUPERHIDIC***™ under the business model of licensing. In both businesses, we diagnose customers' plant equipment and offer consulting on overall efficacy and the scale of renovation. We subsequently provide FS and basic engineering as paid services, receiving compensation based on performance in reducing operating costs.



HERO and *SUPERHIDIC*™ are being introduced around the world.

In basic engineering work carried out for PTT Global Chemical Public Company Limited in Thailand, we used the mathematical optimization technology of HERO to create a plan for reducing GHG emissions on a major scale of 55,000 tons per year. Applying ***SUPERHIDIC***™ to Maruzen Petrochemical Co., Ltd.'s alcohol ketone production equipment, we have been able to achieve energy reduction of over 50% and have already contributed to stable commercial production for over five years. Numerous other projects are also under negotiation following consultations with customers. By advancing the introduction of these, we will contribute to the realization of a carbon-neutral society.

CO_2 emission reduction*1: 110,000 tons → 1.9 million tons by 2030 (target)



*1 Total value of operational projects + basic design documents delivered/under preparation projects
*2 Feasibility study *3 PTT Global Chemical Public Company Limited

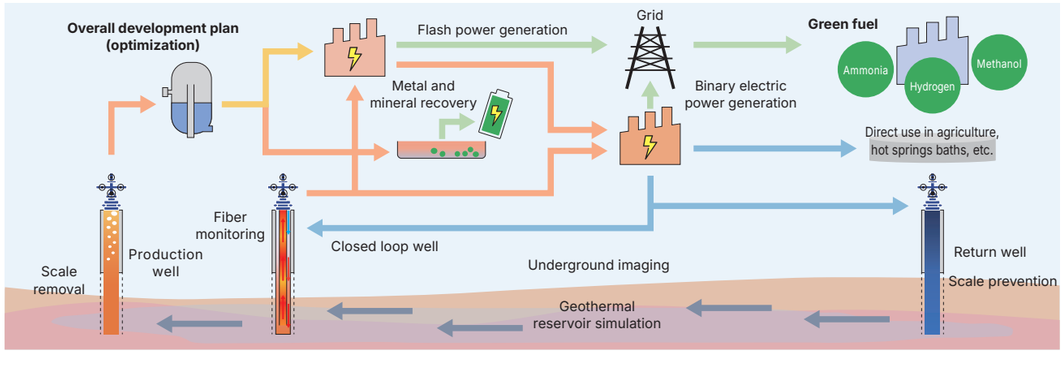
5 Geothermal (carbon neutral park)

The carbon neutral park concept advanced by TOYO

For decades, TOYO has provided petroleum development companies with customer support services. We have also applied our technologies to the development of methane hydrates and rare earths and to the underground storage of CO_2, while also tackling geothermal development in recent years. We are undertaking a variety of initiatives aimed at realizing the geothermal carbon neutral park concept. This plan will advance overall development and optimization in the geothermal field by combining underground and above-ground technologies including underground imaging technologies for the optimization of development plans, Closed Loop technologies* using underground simulations to enable increased production volume, monitoring technologies using optical fiber, underground and above-ground operational optimization technologies, scale prevention and removal technologies to minimize periods of production stoppage, metal and mineral recovery technologies to enhance added value, and green fuel production technologies.

* Technologies that generate electricity from heat recovered from above-ground water passing through underground double tubes, requiring no drawing of water from underground, yielding no scale, corrosion, or interference with hot spring reservoirs, and facilitating application under a variety of field conditions.

Overall concept of carbon neutral park



Geothermal business expanding from Indonesia to the world

In fiscal 2023, we signed a memorandum of understanding with state-run and private-sector geothermal business operators in Indonesia and began taking action toward achieving the geothermal carbon neutral park concept. Indonesia ranks second in the world in geothermal resources and facilities capacity. The nation aims to increase its capacity of about 2.3GW in 2020 by roughly 2.5 times to 5.7GW in 2030. We will launch demonstration projects for carbon neutral parks in 2024 to 2025 to establish technologies, with the aim of commercialization in Indonesia in 2026 to 2027. We will also deploy the technologies in Japan, a country that possesses geothermal resources. Our aim is to go beyond EPC and act as a business operator leveraging the introduction of new technologies to diversify our revenue sources.

Geothermal power plant track record of TOYO's Indonesian subsidiary IKPT

Lumut Balai-1 power plant (55MW) for PT Pertamina Geothermal Energy

Lahendong power plant (20MW) for PT Pertamina Geothermal Energy

Ulubelu power plant (2x55MW) for PT Pertamina Geothermal Energy

Dieng power plant (10MW) for PT Geo Dipa Energi

Blawan Ijen power plant (31.4MW) for PT Medco Cahaya Geothermal

6 Solar carport

Developing a basic construction method that cuts the construction expense of solar carports to about half

The basic construction method for solar carports developed by TOYO seeks to reduce installation costs and to make the price of power generated by solar carports, generally said to be about twice the price of grid-based power, comparable to the latter. We plan to grow the system as new pillar of business through a flat-rate subscription service bundling insurance and operation and maintenance (O&M).

Solar carport

Solar carport features and issues

Solar carports feature larger roofs to bear solar panels. Accordingly, the below-ground foundation is often solidified with concrete to withstand strong winds. Construction work and concrete curing can require one or two weeks, lengthening the construction period. Retail stores face the risk of decline in customers during the construction period, which creates a barrier to adoption.

TOYO's solution to the problem

This new technology, which drives single tubes diagonally into the ground as a foundation, was developed to solve the problem at left. Making the single tubes that secure the carport conical and diagonal maintains the strength to resist pressure from above while ably withstanding pull-out force. Through a no-initial-cost subscription service that bundles solar carport usage fees, O&M, and insurance, the scheme shortens the construction period, reduces costs, and constrains the price of generated electricity to the level of grid electricity.

Competitive advantages: Our key strengths!

Improvement of basic structure	Securing of strength	Cost reduction	Simplicity of introduction
Significantly reduces concrete usage and shortens construction period.	Single tubes driven diagonally also enhance pull-out strength.	Enables reduction of concrete usage and shortening of curing period.	Simple basic structure enables rapid installation work.

Comparison of solar carports and other methods of electrical power procurement

While contributing to decarbonization through renewable energy, this system also addresses the shortage of sites for solar power generation by targeting retail store parking lots. It provides electricity at stable prices through a fixed monthly rate structure. It will also continue to independently supply power even if existing power supply is interrupted by disaster.

	Decarbonization	Ease of change	Ease of expansion	Price stability	Supply stability	Customer convenience
Solar carport	◎	△ Relocatable	◎ Relocatable	◎ Contract price maintenance	○ Possible even during disaster	○ Rain protection & sunshade
Off-site PPAs	◎	△ Depends on contract details	△ Land acquisition is difficult	○ Imbalance	× Not possible during power outage △ Output controls	—
Purchase of electricity from grid	△ Certificate required	○	○	×	× Not possible during power outage	—

Core Topics TOPICS

The case of Seven-Eleven Japan

In fiscal 2023, we delivered solar carports to the SEVEN-ELEVEN JAPAN CO., LTD. (SEJ) for use in environmental impact reduction demonstration stores. The business model of these differs from that of subscription-type solar carports, but TOYO is drawing on this achievement in sales activities toward potential customers.

Looking ahead, we aim to make subscription-type solar carports widespread not only at convenience stores but also at other roadside shops.

Advanced EPC Operation strategy

A Group operational power that brings together the collective efforts of our domestic and international global networks is one of TOYO's strengths. By crossing this operational power with work reform and digitalization powered by DX, we will secure outstanding quality and high profit in the EPC business.

Toward the execution of group company-centered EPC

Toyo-Japan specializes in high-difficulty projects as a command tower for optimal Group strategy and leads the field of Sustainable Technology and Business Development, while global networks autonomously execute EPC in response to widely diverse local needs. Together, these collaborate according to specific companies' areas of expertise to execute EPC in global projects through optimal formations.

KPI

Gross profit composition of main global networks

FY2025: 45% or higher*

FY2030: 50%

* TSPI (Brazil) and OFS (Singapore) are equity method affiliates and thus are not included

The EPC execution capabilities we have built up within our global networks since the 1970s are a great strength of TOYO, one that cannot be created overnight. Our EPC group companies, which have extensive track records in Asia, Brazil, and other regions that hold promise for economic development and plant demand, are valuable assets of ours.

Deepening of Group operations

×

DXoT
(Digital Transformation of TOYO)

Our DXoT aims for ground-up creation and transformation of the architecture of TOYO, the engineering industry, and society as a whole in the digital age. We are promoting a transformation into a "human + digital" leveraged, value-added creation model.

Toward digitization without sanctuary

Target

01 | Realization of a high-value-added business model

We will advance our transformation from a labor-intensive business to a high-value-added business model, and will contribute to the enhancement of company performance and to the prosperity of customer companies and society overall.

02 | Portfolio transformation

Through the realization of a high-value-added business model, we will incorporate investment-led activities into our portfolio and will explore and commercialize new growth opportunities.

03 | Ambidextrous management

While deepening our existing businesses and enhancing profitability and competitiveness, we will explore new growth opportunities through innovation and will establish these as businesses.

04 | Improvement of project efficiency and success rate

We will promote the full adoption and use of digital technologies and AI, together with work reform grounded in DX, to significantly enhance our efficiency and success rate in the EPC business.

Global operations through multiple global networks

TOPICS

FPSO projects
-Examples of projects in Guyana and Brazil-

In 2022, TOYO collaborated with Mitsui Ocean Development & Engineering Company (MODEC) to establish Offshore Frontier Solutions (OFS), a strategic affiliate in Singapore that implements engineering, procurement, construction, and installation (EPCI) in the floating production storage and offloading (FPSO) field.

POINT 01 Construction of a system that leverages the strengths of global networks

Maximizing MODEC's market-building power and knowledge as well as TOYO's top-side achievements and know-how in FPSO, we won orders in 2023 for the Uaru project of ExxonMobil in Guyana and the Raia project of Equinor in Brazil. We are advancing the projects by constructing a powerful structure within the TOYO Group that leverages the strengths of multiple strategic global networks including Toyo-India (top-side detailed engineering), Brazil-based EBR (module yard), and Toyo-Japan.

POINT 02 The fusion of partners' and TOYO's strengths

By adding the engineering and project management capabilities of the TOYO Group to the knowledge of MODEC, which is well-versed in requirements specific to FPSO, we will fuse the strengths of the two companies to yield synergies. We aim to further tackle winning orders and executing FPSO projects, an area that continues to hold promise for demand.

FPSO 3D model for the Guyana Uaru project

Image of Brazil Raia FPSO project when completed

TOPICS

Petrochemical projects
-Example in China-

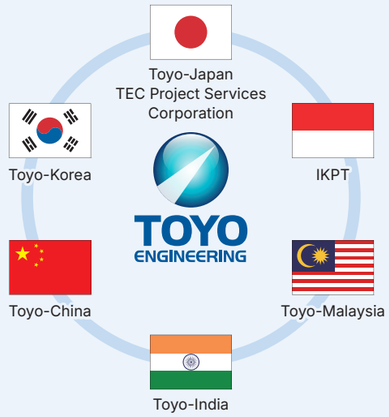
Germany-based BASF is building a large petrochemical complex in the city of Zhanjiang in Guangdong Province, China. Launched in November 2019, the project marks the largest investment plan in BASF's history, with total investment by 2030 reaching about 10 billion euros. TOYO is carrying out the following work.

1) EPsCm*1 for the acrylic acid plant
2) PMS*2 for the ethylene plant, product storage facilities, and polyethylene plant
3) Project management/supervision work for the plant complex overall

*1 Engineering, Procurement support, Construction management
*2 Project Management Support

POINT Project execution through cooperation among multiple global networks

TOYO signed a comprehensive engineering partner agreement with BASF in 2013. Maximizing the strengths of global networks including Toyo-China, Toyo-India, Toyo-Malaysia, Toyo-Korea, IKPT (Indonesia), and TEC Project Services (TPS), we are contributing to BASF's investments in the Asia-Pacific region. As seen in cases such as this, TOYO is characterized by the ability to coordinate and implement the ideal formation of large-scale and complex projects around the world, taking advantage of the strengths of our global networks.



Promotion of DXoT

Transformation into a “human + digital”-leveraged business model

Since 2019, we have been undertaking company-wide DX reforms that we call “Digital Transformation of TOYO” (DXoT), aimed at effecting a transformation from conventional “human”-leveraged value-add creation to a “human + digital”-leveraged value-add creation model. Four main goals underlie our transformation to this model.

Noriaki Seo
General Manager, DXoT Planning & Promotion Center

01 Cost reduction

We will work out cost reductions through the automation of operations with digital technologies at the core, and, using data generated from that, enhancement of business efficiency and optimization of assignment and procurement

02 Working out the human resources that form the core of business

We will replace a portion of work previously performed by people with digital technologies to eliminate bottlenecks in growth and business expansion

03 New business development

We will transform into a structure capable of investing a portion of the human resources and profit worked out in 01 and 02 in new business development, and will ensure the robustness of management by constructing and operating an appropriate business portfolio

04 Maximization of digital investment ROI

We will enhance the sustainability of management through transformation into a “human + digital”-leveraged organization capable of generating greater ROI through digital investment

A value-added model leveraging “human + digital” → Achievement of 6-fold productivity → Working out human resources → New business development → Transforming the evolution of technology into a force propelling the organization toward sustainable growth

Realizing a value-added model leveraging “human + digital”

Advanced EPC Operation strategy

E Engineering capabilities

Maximization of productivity through a data-driven approach to engineering

Based on the best practices we have built up over time, we continue to evolve our engineering processes through a data-driven approach that incorporates digital technologies. Through leading indicator management grounded in engineering productivity, we are able to automate and visualize the measurement of progress toward deliverables, more appropriately measure risks at every stage of projects, and more minutely consider and execute management strategies for keeping projects within schedule and budget. This management also supports benchmarking for engineering productivity in future projects.

P Procurement capabilities

Strengthening of competitiveness through strengthened management and through optimized supply and demand in the supply chain

Plant construction projects involve high uncertainty, and complex supply chain management is vital. In response, we have introduced mechanisms for data-based collaboration and integrated management throughout projects, achieving visualization of the supply chain overall. Using a demand forecasting model to enable timely procurement of required materials, we are shortening lead times and raising the efficiency of material procurement. In addition, we use a supply chain selection simulator to select optimal suppliers in the effort to maintain consistency in quality control and optimize costs.

C Construction capabilities

Introduction of on-site digital twins in AWP and enhancement of productivity

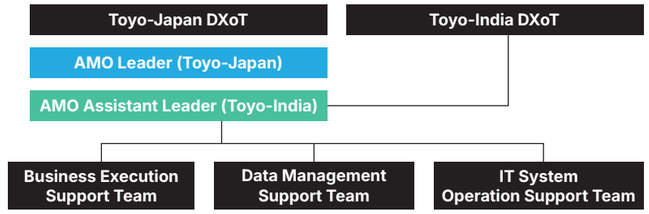
We have introduced on-site digital twins in Advanced Work Packaging (AWP)*, and have built and implemented an innovative mechanism for centrally managing EPC status. Through the ability to assess the progress of phases from engineering to procurement and construction in real time, communication efficiency has greatly improved. This system not only reduces the risks of delays and mistakes but also enables the prediction and advance handling of problems such as excess or insufficient materials and delays in delivery, achieving optimal allocation of resources and dramatic enhancement of construction productivity.

* AWP: A method of dividing projects into manageable units (i.e., work packages), creating network schedules, setting and planning constraints such as blueprints, materials, and resources in advance, and executing and managing the projects

Execution of strategy in global operations

The fusion of global operations and DXoT forms the core of our Advanced EPC Operation. DXoT supports a new form of project management using the AWP method. The combination of DXoT and AWP is a powerful tool for innovation and streamlining in project management, enabling a new form of project management. Through this approach, we are now able to aim for sustainable growth and advancement with our value-added model leveraging “human + digital.”

AWP implementation support structure through AMO



We established the AWP Management Office (AMO) with the goal of maximizing value amplification through the application of AWP to projects. AMO consists of teams for work execution support, data management support, and IT system operation support. Operated by professional teams selected from our global networks, it supports the practice of AWP at global networks.

Support for value creation through AMO

		Created value
PEOPLE **Enhancement of skills and expertise**	We provide training programs for acquisition of the knowledge and skills needed to practice the AWP method. We support individuals’ career growth by nurturing next-generation human resources familiar with the AWP method.	Improvement of project members’ expertise, enhancement of project success rates, and greater securing and retention of talented human resources
PROCESS **Optimization of project execution**	We support project planning and project execution through AWP methods that incorporate best practices. We also monitor the progress of projects in real time and provide quick feedback.	Strengthening of risk management and quality control, enabling early detection of problems and rapid response while enhancing project success rates and customer satisfaction
TECHNOLOGY **Utilization of digital tools and digital twins**	We support the rapid launch of cloud-based AWP execution platforms, along with project execution using digital tools. We support decision-making in projects through advanced simulations using digital twin technology.	Improvement of project visibility and efficiency, enabling prompt decision-making and problem-solving More accurate and efficient project planning and execution

TOPICS

Example of AWP application

Toyo-India’s EPC project

In March 2023, Toyo-India began an EPC project as the first project to fully apply AWP. As the project progresses smoothly through the stages of engineering, procurement, and construction under comprehensive support by AMO, results including planned reductions in construction period and reductions in man-hour costs through productivity enhancements appear as actual figures. We will continue enhancing the precision of our operations to further improve profitability.

Effects of applying AWP

- **Delivery deadline** 1.5-month contraction
- **Costs**
  Engineer man-hours 5% MH* reduction
  Construction management man-hours 10% reduction
  Construction outsourcing costs 1.5% piping construction work cost reduction

* MH = persons x hours

Strengthening of core competencies through DXoT

Since our founding, TOYO has continually undergone transformation in response to changes in the external environment. This transformation has cultivated numerous core competencies: (1) technical capabilities and emergent capabilities that create new things from diverse things, (2) partnership-building capabilities grounded in our cross-cultural communication capabilities and stakeholder management capabilities, (3) management capabilities under diverse and uncertain environments, and (4) design capabilities grounded in the ability to overview the future of markets and the ability to agilely adapt to change.

These competencies are becoming increasingly important driving forces in achieving the innovation that this era demands to realize humanity's quest for a sustainable society. By executing our DXoT strategy, we aim to strengthen TOYO's core competencies and continue providing high added value to society.

Knowledge management transformation through DX

Our technical capabilities are a vital pillar supporting TOYO's growth. We employ digital technologies to efficiently share and utilize knowledge and information inside and outside the organization, and to fortify knowledge management that enhances our business value. Leveraging AI and data analysis, we efficiently share new knowledge throughout the organization and apply it to next-generation projects. This enhances the quality and efficiency of projects while strengthening our technical capabilities.

01 Technical capabilities and emergent capabilities

Digital technologies x cloud shift through DX

Our partnership-building capabilities will be the key by which TOYO builds, maintains, and advances strategic partnerships and maintains its advantage in a global competitive environment. Utilizing a cloud-based digital platform, we will more effectively and strategically strengthen partnerships and collaboration among companies. Collaboration, information sharing, and other communication will become more fluid and our structure for real-time collaboration will be strengthened. We will further work to expand our global partnerships and enhance our competitiveness in international projects.

02 Partnership-building capabilities

Strengthening of core competencies through DXoT

03 Management capabilities

Overall optimization and decision-making support through DX

Management capabilities are a vital element affecting the success of a project. DX allows us to achieve optimization of projects overall and to support prompt and accurate decision-making. Through real-time data collection and analysis, we stay abreast of the progress of projects and perform thorough risk management. In addition, AI-based predictive analysis allows us to detect potential problems in advance and enact prompt countermeasures.

04 Design capabilities

Management Digital Twins that select optimal scenarios from vast combinations

Management decision-making requires rendering judgments in a limited time frame while taking into consideration numerous factors such as the dynamically changing business environment, customer trends, and the status of the resources of the company and its partners. Based on the AI HUB Platform that aggregates knowledge of data-driven management, TOYO has built a business management model that uses AI/machine learning models and mathematical models. Through "human + AI" collaboration, we are realizing not only visualization of management but also prediction, simulation, and the optimization of choices for achieving strategies, which provides powerful support for decision-making.

Management capabilities

Accelerating the enhancement of management capabilities

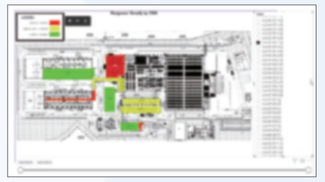
EffiMate™

(Original schedule optimization system)

Creation of optimal schedules for overall projects

Schedule

4D



Manpower analysis

VOICE **Realization of overall optimization of EPC through innovative methods**

EffiMate™, the "ideal partner" that is indispensable to efficient schedule management

The AWP management method advanced by TOYO uses the IoT and AI to enable precise, real-time management. As a backend system for AWP, TOYO has been undertaking development of EffiMate™ since 2022 and is actively promoting its use in projects. Results are showing a shortening of construction periods by about 10%. A plant that is completed early can enter production earlier, enhancing investment turnover ratio for the customer. We have also implemented a question function and a danger detection alert function. We plan further upgrades, including rapid plan modification during project execution management and generative AI features. By solidly yielding cost-cutting effects and preventing risks, EffiMate™ is becoming an indispensable and reliable partner in project management.

Takahiro Yamashita
Project Division

Expected effects of the introduction of EffiMate™

Overall project productivity 25% UP

Engineering productivity	Construction work productivity	Construction period contraction
5.5% UP	3% UP	12%

Addressing Climate Change (Disclosure Based on TCFD Recommendations)

Aiming to realize an environmentally friendly society

TOYO recognizes that preservation of the global environment and prevention of global warming are issues shared by all humankind. Under this recognition, we engage in business activities with "Engineering for Sustainable Growth of the Global Community" as our mission and "Aim to realize an environmentally friendly society" as one of our materialities. In November 2021, TOYO endorsed the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations of the Financial Stability Board (FSB), based on which we formulate strategies and engage in initiatives.

Governance

We recognize that addressing sustainability-related issues is an important management issue that leads to both risk avoidance and the capture of business opportunities. In order to enhance our corporate value in the medium to long term, we have formulated a Sustainability Basic Policy concerning our sustainability initiatives and are building a structure supervised by the Board of Directors.

The Sustainability Committee, an advisory committee to the Executive Committee, also engages in planning, promotion, and monitoring of climate change measures. We formulate basic policies and important matters through deliberation by the Executive Committee, followed by reporting to and deliberation by the Board of Directors.

P. 23 See "Initiatives for Sustainability"

Risk management

Based on our Basic Policy on Internal Control Systems, TOYO identifies potential risks, including changes in the business environment; clarifies the processes for classifying, analyzing, assessing, and responding to risks, and clarifies the company divisions and regulations related to these; and develops and implements systems for risk management. To assess and address latent risks as early as possible, we periodically conduct reviews to identify key risk items and carry out risk management. In the identification and assessment of climate change-related issues, we comply with the framework of the TCFD recommendations, select and analyze key factors affecting our business through scenario analysis, and reflect and utilize the analyses in formulating our Medium-term Management Plan and other strategies.

See P. 83, 84 "Risk Management and Project Risk Management"

Strategy

We conduct our study with reference to (1) the 2.6°C scenario* (Stated Policies Scenario (STEPS)) and (2) the 1.5°C scenario (Net Zero Emissions by 2050 Scenario (NZE)), in line with the framework of the TCFD recommendations. "Transition risks" refers primarily to risks that may occur along the way to a decarbonized society in the (2) 1.5°C scenario, while "physical risk" refers primarily to risks in the case of the (1) 2.6°C scenario in which emission reduction has not been achieved.

* Reference is primarily to "World Energy Outlook 2021" of the International Energy Agency (IEA)

Scenario Analyses: the World in 2050

2.6˚C scenario
Stated Policies Scenario (STEPS)

- **Increase in energy consumption, increase in fossil fuel demand**
  (Reliance on fossil fuels, rise in fossil fuel prices, enhancements to energy efficiency)
- **Increasing severity of natural disasters**
- **GHG emissions remain flat (2050)**

1.5˚C scenario
Net Zero Emissions by 2050 Scenario (NZE)

- **Reduction in energy consumption, decline in demand for fossil fuels, decarbonization**
  (Significant shift to electrification and non-fossil fuel use, decline in fossil fuel prices, significant enhancement of energy efficiency, widespread introduction of carbon pricing, advancement of decarbonized/circular society)
- **Gradual increase in major natural disasters**
- **Achievement of net-zero GHG emissions (2050)**

Major Risks and Opportunities

		Item	Risks	Opportunities
Transition risks (primarily under 1.5˚C scenario)	Policies, laws, and regulations	Carbon pricing	• Decline in demand for conventional plants due to decline in demand for fossil fuels associated with introduction, and increase in plant costs due to rising raw material and equipment procurement costs	• If properly introduced, increase in opportunities for business and receipt of orders for renewable energy-based power generation and non-conventional plants, and enhancement of competitiveness due to procurement of decarbonization-oriented raw materials/equipment
		Licenses and support systems	• Decrease in opportunities for business and receipt of orders, and increase in costs, due to insufficient response to environmental permit strengthening	• Development, demonstration, and social implementation of new technologies, etc. through the utilization of government assistance
	Technologies	New technologies	• Loss of opportunities for business and receipt of orders due to delayed new technology development, etc.	• Capture of opportunities for business and receipt of orders due to the adoption of decarbonization technologies/CCUS or the application of circular economy/circular technologies
		Energy saving and optimization	• Decrease in opportunities for new construction and renovation projects due to delayed action on energy saving	• Increase in opportunities for capture of new projects and existing facility renovation due to application of energy-saving and efficiency-boosting technologies
	Markets	Changes in energy mix, power supply composition, and products	• Decrease in demand for conventional plants due to decline in demand for fossil fuels and proliferation of non-conventional energy • Energy tightness due to manifestation of geo-economic risks and volatility in fossil fuel prices amid transitions	• Increase in opportunities for business and receipt of orders for non-conventional plants due to the progress of renewable energy-based power generation, new technologies, etc. • Risk diversification through overseas expansion into multiple countries/regions; medium- to long-term reduction in fossil fuel prices; price reduction and proliferation of renewable energy-based power generation facilities
		Supply chains	• Adverse effects on stable procurement of raw materials and equipment as well as on qualified suppliers, local transport firms, and subcontractors	• Focused procurement through proper assessments and selective choice of suppliers, and differentiation based on partnerships and alliances, supply chain management, and more efficient construction work
	Reputation	Initiatives for and contributions to climate change response	• If insufficient, impediments to opportunities for business and receipt of orders, partnering, securing of human resources, financing, etc. due to decline in reputation among customers, partners, and markets	• Differentiation and increased opportunities through establishment/enhancement of evaluations by stakeholders
Physical risks (primarily under 2.6˚C scenario)	Acute and chronic	Natural disasters due to abnormal weather	• Delays in project execution, decreased productivity, deterioration of working environments, etc. due to increased severity (Acute: typhoons, flooding, etc.; Chronic: long-term heat waves, sea level rise, etc.)	• Strengthening, maintenance, and expansion of business (due to target-site risk response, insurance coverage, and safety measure costs; decentralization of suppliers; minimization of on-site construction work through modularity, etc.; business continuity planning (BCP); etc.)

Risks, Opportunities, and Strategies in Major Business Fields

Main transition risks ▲ and opportunities/actions ●

Business field	Medium-term (through 2030) Long-term (through 2050)
Energy	▲ Decrease in opportunities for receipt of orders for conventional plants in the oil and gas field due to the transition to clean fuel, but continuation of short- and medium-term business opportunities for conventional plants in emerging nations during the transition period due to the continuation of current economic development. ● Increase in opportunities for business and receipt of orders for decarbonization-oriented plants aimed at achieving a carbon-neutral society by utilizing existing technologies for ammonia, hydrogen, and synthetic gas, know-how of CO_2 recycling, and new technologies from our Company and out partners.
Chemicals	▲ Decrease in opportunities for receipt of orders due to decreased demand for conventional petrochemical plants that use fossil raw materials/fuels and emit CO_2 in large volumes. ● Increase in opportunities for receipt of orders for new decarbonized (blue or green) petrochemical plants, and the gradual implementation of conversion to alternative fuels in existing facilities. Increase in opportunities for receipt of orders for higher-efficiency plants through the adoption of energy-saving technologies as well as in the high-performance materials field and circular economy field, including, waste plastic recycling and the use of biodegradable plastic.
Power generation	▲ Decrease in opportunities for receipt of orders for gas-fired or coal-fired power generation due to the transition to clean power, but also increased opportunities for receipt of orders in the short to medium term due to the transition to LNG, which emits relatively little CO_2. ● Increase in opportunities for business and receipt of orders for overseas projects and large domestic projects that leverage our renewable power generation technologies and project track record. Increase in opportunities for business and receipt of orders related to ammonia co-firing for existing thermal power generation and future single-fuel firing.

Specific initiatives

Promotion of EPC, non-EPC (Pre/Post-EPC, technological development, business development), value chain construction, etc., including co-creation with partners, particularly in the following fields:

Carbon-free fuels (ammonia, hydrogen fuel, decarbonization of fuel for power generation, synthetic fuel (e-fuel/SAF)) Green petrochemicals and CCU (g-Methanol™, green/blue ammonia, CO_2-derived petrochemical raw materials/fuel, heating furnace fuel conversion/electrification)	P. 11, 12, 33, 34 〉
Renewable energy-based power generation, geothermal power generation	P. 37, 38 〉
CO_2 capture (DAC, BECCS)	
Energy saving and resource utilization (HERO/*SUPERHIDIC*™)	P. 36 〉
Renewable/circular (waste plastic recycling, urban mines/biomining)	P. 20 〉

The above analyses are incorporated in our Medium-term Management Plan (2021–2025) strategies.

Metrics and Targets

We are tackling the following goals to reduce GHG emissions.

Scope 1 & 2

- **Achievement of net zero emissions in 2050**
- **30% reduction in emissions by 2030 compared to 2021 (based on GHG emissions per employee)**

Our Scope 1 & 2 emissions in 2023 were about 15,000 t-CO_2, or 1.74 t-CO_2 per person, a reduction of about 7% from the base year of 2021.

Note 1: Emissions are calculated with equity ratio taken into account for equity method affiliates, including for the base year of 2021.

Note 2: We have obtained third-party certification of emissions in 2023 by SOCOTEC Certification Japan.

Scope 3

- **Contribution to reduction of GHG emissions through cooperation with stakeholders and through provision of technologies, products, and solutions.**

Examples of specific initiatives

Energy saving/renewable energy field

SUPERHIDIC ™

(Currently operating) We have delivered basic design documents for the second unit of the ***SUPERHIDIC*** ™ energy-saving distillation system, which is attracting attention for achieving the world's first commercialization of internal heat exchange distillation tower technology. Studies of further units are underway. In all cases, a roughly 50% reduction in GHG emissions compared to normal distillation towers can be expected.

Biomass power generation

(Result) In Japan since 2017, we have received orders for 12 biomass-fired power generation plants with total output of about 650 MW, of which five plants with total output of about 250 MW have been completed. The remaining seven plants, with total output of about 400 MW, are under construction and are scheduled for completion in 2024 to 2025.

Next-generation energy field

Green ammonia production in Indonesia

(Feasibility study) By introducing renewable energy-derived hydrogen for a portion of the fuel of existing ammonia plants, we aim to produce green ammonia and reduce GHG emissions.

SAF

(Demonstrated) Compared to conventional aviation fuel, SAF has a GHG reduction effect of about 50 to 90%. In 2021, we supplied domestically produced SAF derived from woody biomass for use in commercial flights, a world's first. We are also studying the production of SAF from alcohol raw materials, renewable energy-based hydrogen, and recovered CO_2, and will work toward its social implementation in the late 2020s.

Chemical plant field

Practical application of ammonia fuel for naphtha cracking

(Under development) By converting naphtha cracking reactor fuel, which accounts for about 90% of ethylene plant CO_2 emissions, from conventional methane to ammonia, we aim to reduce CO_2 generated from combustion (about 1.3 tons of CO_2 per ton of ethylene production) to zero. We plan to begin demonstration operation of a test reactor in FY2026, with the aim of social implementation of an ammonia-only commercial reactor in FY2030.

g-Methanol™

(Business under development) g-Methanol™ is a technology for producing e-methanol from renewable energy source-derived hydrogen and CO_2. The e-methanol produced is gaining attention for use as a ship fuel, and is expected to yield a roughly 80% reduction in GHGs compared to heavy oil fuel.

Environmental Initiatives

To contribute to the protection of the global environment, TOYO has set out the following basic policy and principles on the environment, under which we carry out environmental management actions and undertake environmental impact reduction and environmental preservation initiatives, including waste separation. By providing plants that achieve low environmental impact through the latest technologies, together with our stakeholders we will realize the reduction of GHGs emitted from varied plants.

Basic Policy and Principles on the Environment

Addressing the environment (E) in its Basic Policies on HSE, Quality, and Information Security, TOYO stipulates that it will "minimize environmental impact by saving resources and energy, detoxifying, reducing and recycling waste, and by preventing environmental pollution during the course of our business activities."

Recognizing the preservation of the global environment and prevention of global warming as issues shared by all humankind, TOYO has set "Aim to realize an environmentally friendly society" as one of its materialities and engages in business under the environment-related basic philosophy at right.

- **We contribute to the achievement of sustainable communities and society, enabling both advancement of humanity and preservation of the environment.**
- **As an international company, we provide engineering services in harmony with the global environment.**

Environmental management

Based on ISO14001 certification standards, TOYO implements the environmental management actions at right within relevant divisions, particularly in projects in Japan. We also confirm that these actions are effectively implemented through internal audits and external audits by ISO certified bodies.

1. **Evaluate compliance with environment-related laws**
2. **Formulate and implement the set of three environment-related actions** (evaluation of environmental impacts, setting of environmental targets, and implementation of environmental programs)
3. **Take and monitor environmental measurements at construction sites**

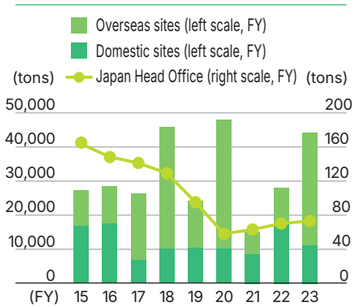
Initiatives for environmental impact reduction and environmental preservation

TOYO performs thorough wastes separation, proper treatment and disposal of hazardous substances, and management of contaminants at domestic and overseas construction sites and at its Head Office in Japan. Since obtaining ISO14001 certification in 2004, we have maintained a record of zero environmental accidents. At construction sites in Japan, we also work to limit waste generation and maintain a recycling rate in excess of 83%.

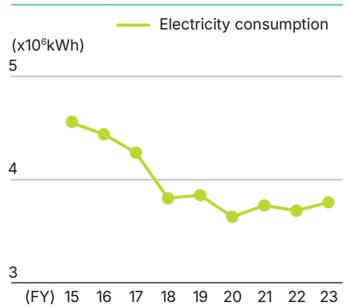
At the Head Office, we also raise employees' environmental awareness through activities that include using rooftop rainwater in toilets, turning off lights during breaks, and opening and closing window blinds. Since May 2024, we have fully switched to renewable energy-based electrical power at the Head Office. We expect this to yield a reduction in CO_2 of approximately 1,800 tons over the 8-month period through December 2024. We are also working to maintain and preserve biodiversity, and in past projects have developed nature preservation areas for rare wild animals and plants.

Our consumption of electricity and use of tap water and rainwater at the Head Office in Japan are shown in the graphs below.

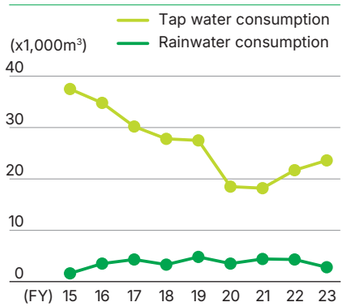
Waste Volume at Domestic and Overseas Construction Sites and the Japan Head Office from 2015 to 2023 (9 Years)



Electricity Consumption from 2015 to 2023 (9 years)



Tap Water and Rainwater Consumption from 2015 to 2023 (9 years)



Examples of GHG emissions reduction initiatives

To contribute to the protection of the global environment as a global engineering company, TOYO will reduce GHG emissions originating in our engineering activities and will provide plants that utilize the latest technology to achieve low environmental impact, thereby achieving a reduction in GHG emissions from plants together with our stakeholders.

Contribution to decarbonization through proprietary technologies for energy saving and energy utilization efficiency

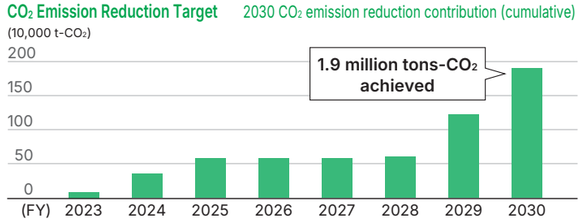
Much of the energy in chemical plants is supplied and used in the form of heat, which is obtained through the combustion of fossil fuels. For this reason, increased energy saving in chemical plants connects directly to the reduction of GHG emissions. Through proliferation of the technologies and consulting services below, we seek to contribute to a cumulative 1.9 million tons of reduction in CO_2 emissions in 2030.

HERO technology for the creation of energy consumption reduction plans in plants

HERO (Hybrid Energy system Re-Optimization) creates energy-saving plans through mathematical optimization technologies that address process systems and utility systems overall. We are engaged in consulting for PTT Global Chemical, Thailand's largest petrochemical company, to create a HERO plan for large-scale GHG emissions reduction totaling 55,000 t-CO_2 per year. Renovation projects are underway in Japan and overseas, based on plans created by HERO. We are also working to apply *SUPERHIDIC*™ by using HERO to optimize conditions in other locations of the plants.

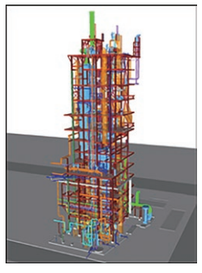
***SUPERHIDIC*™ energy-saving distillation technology**

Distillation is said to consume 40% of the energy of chemical plants overall. *SUPERHIDIC*™, an energy-saving technology for distillation, can reduce energy consumption by 40% to 60%. As the system makes use of heat pump technology, the use of electricity derived from renewable energy sources enables further reduction of GHG emissions to zero.



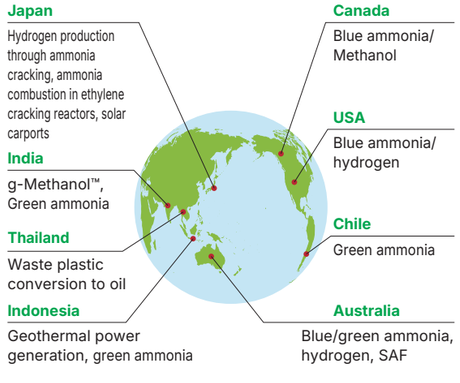
Practical application of ammonia fuel for naphtha cracking

TOYO, Mitsui Chemicals, Inc., Maruzen Petrochemical Co., Ltd., and Sojitz Machinery Corporation jointly issued an application to the National Research and Development Organization for New Energy and Industrial Technology (NEDO) to conduct a demonstration project for the development of advanced technology for naphtha cracking reactors. The project was selected for implementation as a "Development of Technology for Producing Raw Materials for Plastics Using CO_2 and Other Sources" project under NEDO's Green Innovation Fund.



Contribution to the achievement of carbon-neutral society

TOYO will work with customers to contribute to the decarbonization of society by fusing our Group's knowledge of plant engineering with our low-carbon-emission plant technologies. With many countries declaring a goal of net zero emissions by 2050, the decarbonization of raw materials and fuels used in energy-intensive petrochemical plants and power plants, as well as support for CCUS for emitted CO_2, are pressing issues. In the petrochemical field, we offer proposals for the recovery, storage, and reuse of emitted CO_2, along with raw material switching through the recycling of used petrochemical products and the use of recovered CO_2 and green hydrogen produced using renewable energy. In the power generation field, our aim is the realization of a decarbonized society and a circular economy through the proliferation of renewable energy, biomass, geothermal, and other sources of clean electric power, along with fuel switching through the use of fuel ammonia and synthetic fuels.



Human Rights Initiatives

Basic Approach

TOYO recognizes that respect for the human rights of all people affected by our Group's global business activities is the foundation for achieving our materialities of "Enrich people's lives" and "People of diverse backgrounds engage in active, meaningful work." Under this recognition, we have established our Basic Policy on Human Rights under TOYO's Code of Conduct and our Sustainability Basic Policy to further advance human rights initiatives and fulfill our relevant duties.

Under our Basic Policy on Human Rights, TOYO respects human rights as provided for in the International Bill of Human Rights*1 and the Declaration on Fundamental Principles and Rights at Work of the International Labor Organization (ILO)*2, endorses the 10 Principles of the United Nations Global Compact*3, and promotes human rights initiatives in accordance with the Guiding Principles on Business and Human Rights.

*1 The International Bill of Human Rights is a general term for the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, and other covenants adopted by the United Nations.
*2 The core labor standards consist of 10 conventions in five areas: freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labor; the effective abolition of child labor; the elimination of discrimination in respect of employment and occupation; and a safe and healthy working environment.
*3 The United Nations Global Compact is a global framework by which the United Nations and private-sector companies and organizations collaborate to achieve sustainable growth. It consists of 10 principles to which companies should adhere in the four areas of human rights, labor, the environment, and anti-corruption.

Structure for Promoting Respect for Human Rights

P. 24 See "Sustainability Promotion Structure"

To steadily advance initiatives aimed at respect for human rights, TOYO has established a Human Rights Subcommittee under the Sustainability Committee, a committee serving as an advisory board to the Executive Committee and chaired by the Chief Compliance Officer. In cooperation with Group companies, we engage in human rights initiatives under a global structure.

Implementation of Human Rights Due Diligence

To identify, evaluate, prevent, mitigate any negative impacts on human rights in connection with our business activities, TOYO engages in human rights due diligence. We have set the five human rights issues on the right as particular priorities, and will continue and strengthen our actions to address them.

High-priority human rights issues	Current initiatives
1. Occupational Health and Safety	• Fostering a safe culture • Developing and following safety standards • Maintaining and promoting employee health
2. Harassment and discrimination	• Regularly implementing harassment training • Establishing in-house consultation desks • Ensuring the diversity of human resources (women, persons with disabilities, foreigners, mid-career hires)
3. Working environment (working hours and wages)	• Suitably managing working hours • Enhancing work-life balance (remote work system, promoting the taking of childcare and nursing care leave, etc.)
4. Forced labor and child labor	• Requiring that TOYO's Code of Conduct is followed in individual contracts for procurement and construction
5. Supplier management	• Stipulating compliance with TOYO's Code of Conduct in individual procurement and construction contracts, and prevention of bribery • Requesting cooperation with 1 to 4 above, based on our Basic Policy on Business Transactions

* In formulating the above five items, we identified priority human rights issues to be addressed by TOYO based on their severity and possibility of occurrence. We did so with reference to international norms such as the United Nations Global Compact (UNGC) Principles and the five Fundamental Principles and Rights at Work of the International Labor Organization (ILO), and to industry-specific human rights risks (international indicators and tools such as UNEP FI, examples from other companies in our industry, etc.).

Relief and Dialogues Related to Human Rights Risks

To address all human rights risks in TOYO's global business activities, we have set up complaint handling desks within TOYO Group companies. We work to suitably and sincerely address reports received, and, should it come to light that we have caused, encouraged, or had direct connection to adverse effects on human rights, endeavor to rectify the situation and provide relief through appropriate procedures.

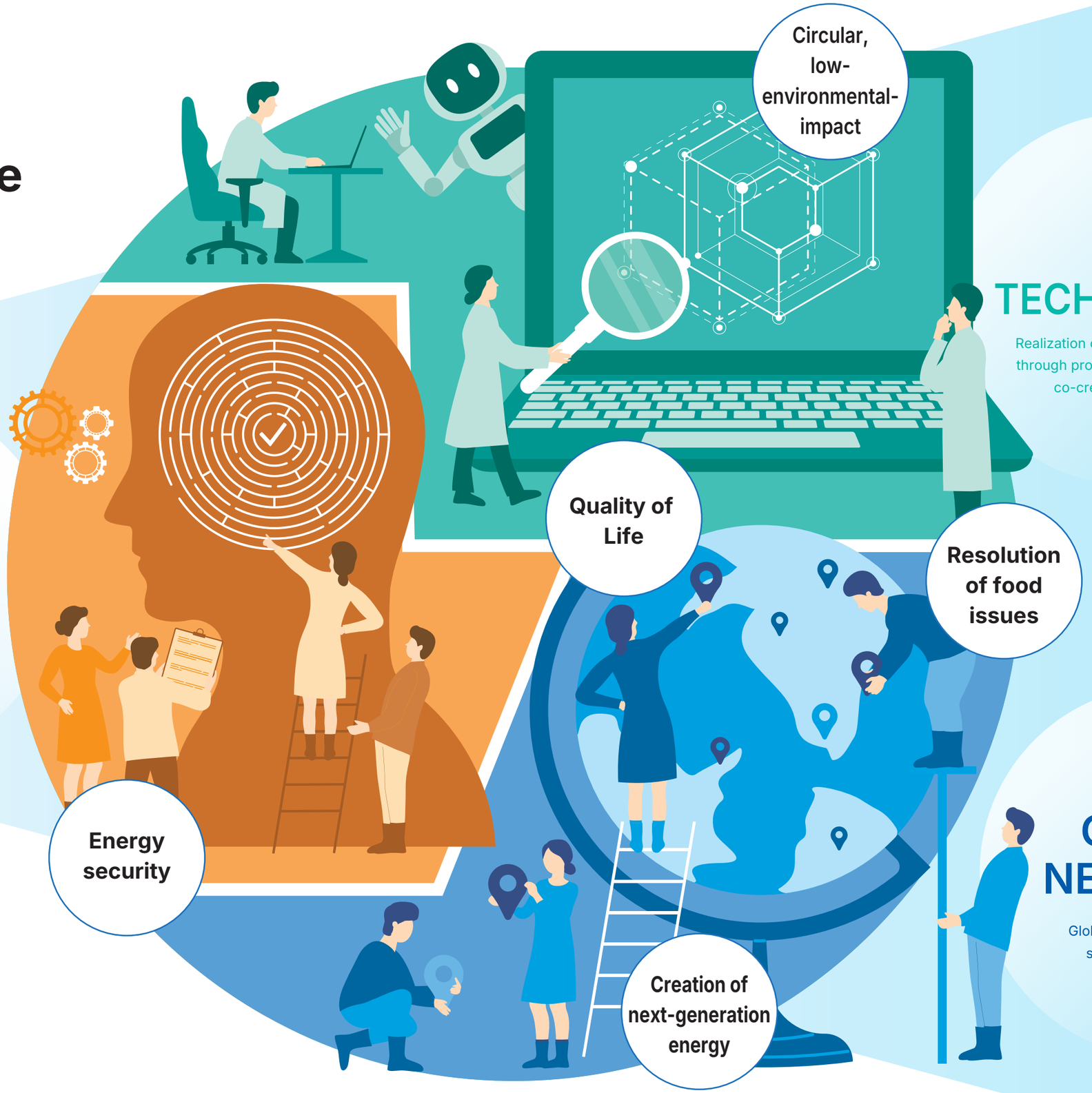
We also draw on the knowledge of outside experts on human rights risks and engage in sincere dialogues and discussions with any adversely affected parties as well as other relevant stakeholders.

Initiatives to Achieve Respect for Human Rights in the Supply Chain

We apply TOYO's Human Rights Basic Policy to all Group executives and employees and work to ensure support for the policy by all suppliers, partner companies, and other business partners in our supply chain with whom we cooperate in addressing human rights.

Toward this end, TOYO has established a Basic Policy on Business Transactions and seeks the understanding of all business partners in respecting human rights while complying with international norms and laws and regulations, eliminating all forms of discrimination, preparing safe and comfortable working environments, and giving consideration to the environment. Together with these partners, we will work to "enrich people's lives" and achieve a society where "people of diverse backgrounds engage in active, meaningful work."

Engineering for Sustainable Growth of the Global Community



HUMAN RESOURCES

Autonomous professionals with extensive knowledge and experience

P. 53

TECHNOLOGY

Realization of social implementation through proprietary technology and co-creation engineering

P. 63

GLOBAL NETWORKS

Global operational capabilities supporting services with regional roots

P. 67

The wellspring of TOYO's sustainable growth lies in our intangible assets: human resources, technologies, and sites.

Our autonomous professionals, equipped with extensive knowledge and experience, provide high-value-added services and solutions to address customer and social issues. Toward that end, we aim to be an organization that always learns and a group on which customers can rely.

We continually refine (1) our proprietary technologies in areas including urea and methanol and (2) co-creative engineering that achieves social implementation as a partner of our customers, identifying promising technologies through diverse technological expertise and discernment built up through a track record of projects, and further enhancing these with our technologies, experience, and know-how.

Our sites around the world all boast product fields of specialty and high EPC capabilities. They engage in independent management rooted in their regions while carrying out projects worldwide in solidarity with the TOYO Group.

HUMAN RESOURCES

Human resources strategy

To achieve the goals of "People of diverse backgrounds engage in active, meaningful work" and "Establish an organization with integrity and discipline," both cornerstones of our business activities, we are updating measures related to recruitment, human resources development and training, environmental development, and more.

Basic Approach

The organization we aim to be and the human resources we seek

"An organization that continues to learn and a group of professionals that our customers can rely on." However the times may change, we believe that our core competence will remain the assured elemental technologies held by each of our employees. Integrating these areas of individual expertise and developing them into new wisdom, without dividing them among areas, is becoming increasingly valuable in future business development.

Human resources required to achieve the Medium-term Management Plan

Human resources capable of flexibly widening their fields of activity without halting their learning of the unknown, human resources capable of leading others to a final destination without losing enthusiasm under any conditions, employees who all embrace a core professional axis – we seek to be an organization composed of such strong individuals.

Human capital investment/Environmental development (Input)

- Human capital investment
  - Recruitment and retention measures
  - Human resources development
  - Compensation, grade, and assessment systems
  - Creation of opportunities for growth
- Environmental development
  - Health and productivity management
  - Work style reform

Human capital measures (Output)

- Enhancement of organizational strength
- Enhancement of employee engagement
- Promotion of autonomous growth

Value creation (Outcome)

Realization of materialities

Achievement of the Medium-term Management Plan

The relationship between the Company and employees

Our Company aims for a relationship by which organizations and employees each contribute to the growth of the other and mutually fulfill their responsibilities. For employees, jobs and careers form vital centers of their lives. Taking an active approach to tackling and developing their jobs and careers, employees strive to enhance their own value and commit to returning that value to the company through their work. At the same time, the company respects the individuality and will of employees and commits to providing motivating opportunities for growth, along with treatment matched to achievements.

Policy measures and the fields of activity of our ideal human resources

01 Development of a comfortable working environment
By developing a working environment matched to diverse work styles through a remote work system, childcare and nursing care leave programs, and other means, we are enhancing the ease of work and enabling employees to work stress-free over the long term.

02 Provision of opportunities for growth and endeavors
We provide young employees with opportunities to tackle high-level duties. We aim to create motivating organization by rewarding employees' achievements and a stance of tackling endeavors, through means including selective promotions and a commendation system.

03 Treatment matched to achievements
We design clear-cut employee treatment matched to the weight of duties borne over the year and the evaluation of achievements, as well as capabilities possessed. Our commendation system also rewards contributions made through outstanding achievements.

Mutual relations among outstanding human resources worldwide
Crossing the boundaries of nationality and company, employees from many countries collaborate as One TOYO.

Shift of human resources to Sustainable Technology and Business Development
We are deploying our knowledge built up in past businesses to create businesses in new areas.

Spreading and connecting...
Fields in which TOYO's human resources demonstrate their abilities

Technical discernment capabilities that achieve strategic alliances with partner companies
We give form to alliances that contribute to advancing the businesses of both the Company and partner companies.

Partnering capabilities that promote co-creation with customers
Leveraging our knowledge and experience, we participate in customers' projects from early stages to undertake the co-creation of technology.

Strengthening of human resources by the Human Resources Development Committee

Director (Advisor), Corporate Administration Division
↓
Human Capital Development Department
↓
Human Resources Development Committee

Committee members drawn from key members Company-wide

- Corporate Strategy Department
- Safety, Quality and Environment Management Division
- Finance and Accounting Division
- Digital Integration Division
- Engineering and Technology Unit
- Sales Unit
- Project Unit
- Construction Division
- Procurement Division

The most important assets of the Group overall are its employees, the individual capabilities of which are intellectual assets that directly relate to the medium- and long-term development and competitiveness of our business. To maximize the human resource value of our employees as a vital management resource, we established this committee in 2023 as a venue for holding discussions based on a company-wide, medium- to long-term perspective when drafting personnel-related measures. With the aim of a structure that links management strategy with human resources strategy to drive both organizational growth and human resources growth in tandem, key members from across the Company take part in the committee to mesh business measures with personnel measures.

Main activities of the Human Resources Development Committee

Priority action items

Key topics are primarily as follows:

(1) Human resource development, including capabilities and skills
(2) Engagement enhancement measures
(3) Measures to strengthen and revitalize organizational strength and related personnel strategies

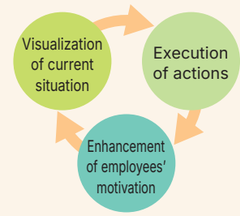
In fiscal 2023, we held discussions on defining our vision for new business-related human resources and its inclusion in our training system, as well as discussions on our evaluation and compensation systems.

☞ PICK UP

Engagement survey
- Transformation of corporate culture - Introduction of engagement surveys

To assess employees' degree of work engagement, including their vitality and enthusiasm in everyday work, we conduct a survey of all employees every two years. In addition to numerical responses, the survey receives about 3,000 free-form comments from employees every time, expressing employees' hopes to make the company even better. We take the findings of this organizational health checkup seriously, reflecting the findings in measures to enhance engagement. In fiscal 2023, the categories "Human relationships" and "Psychological safety" received high evaluations, while issues stemming from a shortage of personnel unfortunately garnered lower evaluations. We plan to further strengthen our training and recruitment to resolve our staff shortages.

Conceptual diagram of the survey and the PDCA cycle



Acquisition of human resources

01 New graduate recruitment
Under a recruitment environment made difficult by a declining birthrate, aging population, and strong recruitment drives by companies, we highlighted the Company's appeal through internships and employee interviews and undertook attentive follow-up. As a result, we welcomed 57 new employees in April 2024.

02 Referral recruitment
We use a method of recruitment by which employees refer acquaintances to the Company, which avoids direct competition with other companies. This initiative, premised on high satisfaction among our employees themselves, resulted in six people joining the Company in fiscal 2023. Following human resource introductions and scouting, it forms a third pillar of recruitment.

03 Alumni
We encourage former employees to return after acquiring outside knowledge and experience not available at our Company. We also position this an area of focus in the future, from the perspective of business collaboration outside of recruitment.

04 Mid-career recruitment
While the career change market undergoes revitalization in line with changes in the social mindset toward work, we carried out recruitment activities through varied media. Due to the unique nature of our business, we did so amid a constrained inflow into the market of human resources that meet our recruitment requirements. As a result of our efforts, we hired 38 people in fiscal 2023.

HUMAN RESOURCES

Human resources development

An organization that continues to learn.
Toward a professional group

We provide support allowing individuals to form a core professional axis and become autonomous professional human resources. We further offer TOYO Academy and other in-house lectures aimed at the acquisition of peripheral knowledge surrounding the expert knowledge of employees' divisions, as we seek to develop human resources who hold a holistic mindset without dividing specific areas. To ensure that this becomes "living knowledge," we also conduct on-the-job training (OJT) centered on practical on-site work. We further provide opportunities for skill acquisition tailored to individuals by offering level-specific training or selective training for the human and conceptual skills required for each level and role.

☞ PICK UP

TOYO Academy

Under senior and mid-career employees in the Company serving as instructors, we conduct flipped-classroom education with a focus on topics such as project management and engineering. We recommend that employees take courses within six years of joining the company as we aim for the early development of human resources with a holistic mindset. In FY2023, we held 36 courses.

Overseas group company OJT

Through the deepening of Group operations, we seek to have overseas group companies offer opportunities for business experience not obtainable in Japan. This allows engineers in particular to learn detailed engineering and grasp the essence of collaboration within other cultures. In FY2023, we dispatched 14 persons.

DX Seminar

Employees seek opportunities to improve their DX skills and expand the scope of their work by engaging in DX work as training, doing so in parallel with their work in their divisions. In FY2023, 18 general staff position employees responded to an open call for participants and took on the challenge.

Collaboration with managers in charge of human resources training

Following training policies derived from Company-wide policies and incorporated into divisions, managers in charge of human resources training draft and carry out the training plans required by divisions. The managers also bear responsibility for subsequent follow-up to increase training effectiveness.

360-degree feedback

Employees receive multi-faceted and objective feedback on their everyday words and actions, acknowledge their own strengths and weaknesses, and work to further grow their strengths and improve conduct related to their weaknesses.

OJT & Advisor system

We support the autonomy of new employees for one year under a structure of work guidance supervisors and advisors. The latter have the role of encouraging introspection in new employees and providing feedback to work guidance supervisors.

Support for language skills and global core skills

We fully subsidize fees for the TOEIC® examination, a requirement for promotion, for employees who have updated their personal high score in the TOEIC® IP test that we conduct in-house four times a year.

Qualification subsidies and commendation system

We partially or fully subsidize the expense of obtaining qualifications designated by the Company. Once a year, we issue commendations to employees obtaining qualifications of particular benefit to the Company.

DATA

Investment in human resources development

To turn out autonomous professional human resources, we will focus on quickly bringing young employees to fighting strength and on strengthening the management capabilities of divisions, with the goal of realizing our current Medium-term Management Plan (strengthening of EPC and non-EPC business) and connecting this to raising the level of the organization overall. In the current fiscal year, we have begun a full-scale review and restructuring of our training system and are increasing our investments in human resources development to accelerate our momentum in connecting individuals' strengths to the reinforcement of organizational capabilities.

Amount of investment in human resources development and training hours over time

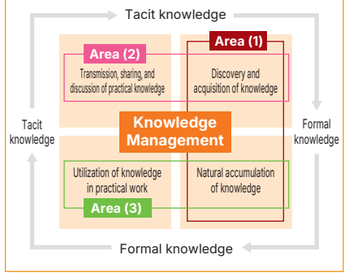
FY2022	FY2023	FY2024 (forecast)
94 million yen	**82** million yen	**234** million yen
14,400 hours	**14,631** hours	**20,265** hours

* Only Human Capital Development Department planning training at Toyo-Japan is tabulated. Training time costs are not included.

Human resources development aimed at the strengthening of functions and the enhancement of value provided by our engineering capabilities, procurement capabilities, and construction capabilities

Engineering capabilities

Utilizing our Feedback Knowledge Management System (FKMS), we are making efforts to strengthen our engineering capabilities and enhance our quality and competitiveness by incorporating our accumulated knowledge into work processes and extracting required knowledge when required.



Procurement capabilities

The goal of our human resources development is 4A human resources capable of achieving goals (Achieve) even when working overseas (Abroad) on their own (Alone) at another company (Away). Toward this end, we have dispatched multiple employees on long-term assignments to verify the quality of Chinese and Indian manufacturers and to perform purchasing at our joint venture in Singapore.

Construction capabilities

To strengthen our construction work execution capabilities, we carry out the FCM Early Assignment Challenge that aims to instill the construction management know-how, skills, and knowledge demanded of Field Control Managers (FCMs), as well as develop leadership and negotiation capabilities.

FCM Challenge results over time

* Results from domestic sites

Initiatives for the development of human resources for new businesses

Setting of behavioral traits that differ from those of existing businesses

All employees assigned to the Next Generation Technology Development Department, which pioneers new businesses, come from existing EPC technology divisions. Accordingly, we verbalized the differences between new businesses and existing businesses in our image of ideal human resources and behavioral traits, and incorporated the following three points into division management and individual goal setting

(1) Define MVV (Mission, Vision, Value) for the department
(2) Move from a focus on planning to a focus on execution
Reform mindset from one of 80% preparation to 20% preparation
(3) Aim for interactive, flat organizational division operation

Implementation of interactive organizational development

The development of new technologies requires a change from a conventional, management-oriented organization to a network-oriented organization. To instill the relationship-building skills and ownership necessary for collaboration with external parties, we undertake interactive organizational development focused on a soft approach.

HUMAN RESOURCES

Work Style Task Force

Employee job satisfaction and the development of a comfortable working environment

TOPICS

Innovation in work styles through office relocation

We expect that our new office, scheduled for relocation in January 2025, will function as a space where a group of professionals with strong individuality, acting under the keywords “mobility,” “cohesion,” “professionalism,” and “communication," demonstrate their individual intelligence, unite through mutual complementarity and mutual learning, and combine their intellects. We intend to incorporate the new concept of Activity Based Working (ABW) that allows employees to autonomously choose places for work matched to their activities at the time. By doing so, we aim to help employees work with greater independence and to raise the quality, productivity, and creativity of their work.

Characteristics of ABW include high autonomy that allows free work styles and increased opportunities for communication through varied zoning within the office. Our hope is that the office will function as a space where employees gain new perspectives by moving freely within the space instead of remaining with the same scenery and members, and where diverse individuals come together in mutual understanding to create new innovations. We further expect that employees possess the mobility to quickly return these outcomes to the organization, contributing to its strength.

Interior

Two mechanisms for improving job satisfaction

Provision of opportunities and appropriate rewards to high performers

We actively provide opportunities to highly capable human resources, regardless of age. When a young employee has been selected for a main position normally held by upper management, we a pay a position allowance and reward the employee’s contribution in a timely manner. By abolishing seniority and recognizing selective promotion, we support further enhancement of capabilities and support job satisfaction through sense of accomplishment, including in terms of compensation.

Career development

We support the practice of proactive career formation by which employees themselves have a self-understanding of their motivation and values, and envision career goals while the organization adjusts its needs and expectations. Specifically, in addition to quarterly interviews with immediate supervisors, during employees’ training period we regularly create opportunities for career review interviews with other division heads to enable career alignment from a broad perspective.

TOYO Group initiatives for human resources development

By promoting global communication through seminars and events held in collaboration with group companies, we are strengthening the Group’s network of human resources and connecting this to new value creation.

TOPICS

TOYO Global Leaders Seminar

With group company employees among the participants, this seminar deepens understanding of TOYO, fosters a sense of belonging, enables acquisition of business skills and leadership development within different cultures, and builds human networks among group companies. In fiscal 2023, 26 people from six global networks participated.

TOPICS

Global Award

Employees who have demonstrated high professionalism and have made outstanding contributions are selected for commendation every year by each TOYO Group company. Through these commendations, we make exemplary actions embodying TOYO’s values visible throughout group companies and work to further instill those values. Together with their families, employees receiving commendations are invited to a commendation ceremony held in Japan.Together with their families, employees receiving commendations are invited to a commendation

Diversity & Inclusion

Employees of TOYO are an increasingly diverse mixture of new graduate recruits, mid-career recruits, seniors active past retirement age, foreign employees, and employees engaged in childcare and nursing care. The TOYO Inclusion Declaration states that we reject a uniform work style premised on homogeneous employees, and that our people will maximize value amid work styles and environments aligned with diversity, will mutually acknowledge the contributions of individuals to the organization, and, as a group, will connect these actions to enhancing the value of the organization.

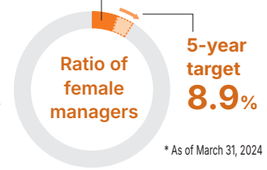
The TOYO Inclusion Declaration

When	Now, as our organizational members advance in diversity,
Who	let all employees of TOYO
How	accept and respect each other’s individuality, gender, age, country, and cultural differences as they are, and,
Where	within a flexible environment allowing people to work their own way,
What	let all employees enhance their own value to the maximum and contribute to our transformation toward a competitive TOYO!

Established on September 19, 2018

Active participation by women

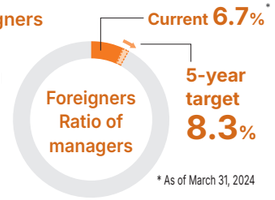
In recent years, women in career track positions have steadily increased. For ambitious women who demonstrate leadership, our policy is to actively promote these employees to management positions.



* As of March 31, 2024

Recruitment of foreigners

To further strengthen our global business operations, we are moving forward with the deployment of capable foreign employees through new graduate recruitment, mid-career recruitment, and the promotion of temporary employees to regular employees.



* As of March 31, 2024

Family care

To support employees’ life planning and to address Japan’s declining birthrate and aging population, in April 2024 we supplemented our existing menstrual leave with new leave programs for infertility and menopausal disorders.

Employment of the physically challenged

Our Group as a whole actively promotes the employment of physically challenged people. By finding a space for active work within the company and demonstrating their capabilities, they contribute to the advancement of the organization.

Employment of seniors

Even after retirement age, nearly 100% of our employees remain active in our company. We offer a flexible employment system and an employee treatment system that take into account personal motivation and work and life balance.

TOPICS

Nursing Care Cafe

We hold the Nursing Care Cafe twice a month during the time for lunch break. This is as a space where employees can share their experiences, worries, future concerns, and other thoughts concerning nursing care and can consult with experts. The second Wednesday of the month is set aside as time for conversation among in-house members, while the last Wednesday of the month hosts a consultation meeting with participation by the non-profit organization Tonari no Kaigo. Nursing care seminars and individual consultations on nursing care are also possible as part of the support we provide to employees for balancing work with nursing care.

Nursing Care Cafe held in 2024

HUMAN RESOURCES
Trilateral Dialogue

Human Resources Strategy and Organizational Development for Sustainable Growth

What kind of human resources and organizational vision does TOYO need now to continue achieving sustainable growth?

The Sustainable Technology and Business Development Strategy and Advanced EPC Operation Strategy outlined in our Medium-term Management Plan are critical engines for TOYO as we navigate this era of rapid change and aim for continuous growth. Our human resources, one of TOYO' s most valuable assets, are the driving force behind these efforts.
What kind of talent will support the continued evolution of our EPC business and foster the development of new technologies and business areas? And what is our ideal vision for an organization that maximizes the potential of its people?
In a three-way discussion, an Outside Director, a technology creation manager, and the General Manager of the Human Capital Development Department explored strategies for human resources and organizational development that will enable our people and organization to keep learning and growing. This dialogue combined insights from both inside and outside the Company.

General Manager of the Human Capital Development Department, Corporate Administration Division
Takao Kazami

Kazami joined TOYO in 1991 as an instrumentation design engineer, gaining extensive experience in proposal, engineering, construction, and commissioning, primarily on overseas projects. He transferred to the Project Division in 2010, became General Manager of Electrical and Instrumentation Engineering in 2016, and was appointed Deputy Unit Director of Engineering and Technology Unit Deputy in 2023. In April 2024, he assumed his current role as General Manager of the Human Capital Development Department.

Outside Director
Sayoko Miyairi

After working at a foreign financial institution and a consulting firm specializing in organizational and human resource development, Miyairi has served as a university professor since 2000. She has applied her expertise in organizational development and behavioral science to support climate reform in numerous companies and has been an Outside Director at TOYO since 2020.

Executive Officer, Deputy Unit Director of Engineering and Technology Unit, General Manager of Next-G Technology & Application Division (T-Next)
Kenichi Tominaga

Tominaga joined TOYO in 1989, working on engineering and construction projects for ethylene plants in Japan and overseas as a process design engineer. He became General Manager of the Process Technology Division in 2016 and, in 2019 was appointed General Manager of Next-G Technology & Application Division (T-Next), focusing on developing and implementing carbon-neutral technologies. Since 2020, he has served as Unit Director of Engineering and Technology Unit and became an Executive Officer in 2022. In March 2024, he completed an MBA focused on organizational development.

TOYO's Human Resources Strategy and Organizational Development

Kazami When discussing our human resources strategy, the first fundamental point is that our core strength lies in effectively managing and executing diverse EPC projects. This is achieved by leveraging our specialized elemental technologies, knowledge, and extensive experience in EPC project execution. Additional key aspects include advancing productivity through Advanced EPC Operation and digital transformation (DX), strengthening our global operations via our group companies, and channeling the knowledge and profits generated back into the development of new technologies and business ventures. In essence, we are aligning our business activities closely with our human resources strategies.

Currently, our approach to developing new technologies and businesses doesn't involve venturing into entirely uncharted areas. Instead, it focuses on exploring incremental shifts within our existing business domains. As previously mentioned, I believe it involves fostering a mindset among our team to embrace new challenges by viewing their core work from different perspectives. This also means creating opportunities for growth for those well-suited to new businesses and business development. One effective measure for achieving this is a rotation-based approach to human resource development.

For young employees on the career track, our system requires a minimum of one year of experience in a different department as a prerequisite for promotion to managerial positions. This promotes a broader organizational rotation and encourages diverse exposure within the company.

Miyairi When I became an Outside Director at TOYO three years ago, the Medium-term Management Plan was presented to me. My first question was how the company planned to secure human resources for new technology and business development. New businesses require speed and the flexibility for trial and error. For this reason, I felt that individuals who have been actively engaged in existing business areas might find it challenging to adapt to new approaches and ways of thinking. Additionally, simply hiring new talent for these areas won't yield the best results unless the "groundwork" is prepared to allow these individuals to thrive. This is where I see the challenge in balancing new and existing businesses.

Tominaga During my time in a graduate program for working professionals, I researched organizational strategies for balancing new and existing business activities. One approach I discovered involves having individuals engage in both existing and new areas concurrently. This could mean continuing with their current responsibilities in the same department while also taking on new work within a network-based structure that connects them to innovation projects. The aim is to enable individuals to foster both the established and new cultural mindsets within themselves.

Kazami One challenge we currently face with our rotation system is that it's difficult for employees to step away from their existing responsibilities. Mr. Tominaga's approach allows individuals to take on new challenges while remaining within their existing organizations. Though it's not an easy task, I believe this approach, if managed effectively, could support the expansion of new business fields. An example within TOYO is the TOYO Future Advancement Department where staff from various departments take on additional roles, forming teams centered around specific themes to enhance TOYO's future direction. I believe this structure is aligned with what we've discussed.

Human Resource Development and Mid-Career Recruitment

Miyairi The turnover of talent in their 30s and 40s is occurring across industries. This also presents an opportunity, as the mid-career recruitment market now includes professionals with diverse backgrounds. We can hire individuals with unique strengths and experiences not previously found at TOYO, or even bring in executive and management-level talent to drive innovation. However, to fully leverage these recruits, we need a flexible system that accommodates a variety of values and preferences, rather than a one-size-fits-all approach. This adaptable framework forms the "groundwork" I mentioned earlier.

In our rotation system, we also need to include opportunities that allow individuals to step forward and embrace challenges on their own, rather than simply being assigned by the company. Human resource development doesn't happen through directives from supervisors; we need to demonstrate how the company creates opportunities for growth. Since people learn at different paces and through different methods, we must show that there are abundant opportunities for personal and professional development.

Kazami At TOYO, we encourage young employees to take on challenging tasks early in their careers. I believe that encountering such opportunities shortly after joining the company—such as handling domestic and international clients or going on solo overseas business trips—promotes significant growth. Beyond sending employees to international offices or group companies for business purposes, we actively support the development of young talent through hands-on engineering training, such as base OJT, where trainees learn directly from local employees at overseas group companies. We also offer secondment opportunities to business partners, providing exposure to new skills and experiences.

I feel that departmental transfers are relatively accessible within TOYO. Personally, I started in engineering, but through opportunities to work on projects I was interested in, I was able to explore different roles and gain diverse experiences.

Tominaga I believe there's room for us to offer even more challenging roles. Some companies have systems that allow young employees to lead entrepreneurial initiatives within group companies, which can foster a strong sense of ownership and innovation.

Ultimately, what drives people is their intrinsic motivation—their interests, concerns, and the powerful inner drive to make an impact. A sense of purpose in work, a desire to grow, and a passion for specific tasks fuel this enthusiasm. For instance, managers at our overseas group companies are motivated by ambitions like pursuing new decarbonization efforts, going beyond the scope of existing work. Talent like this can bring about transformative results.

HUMAN RESOURCES
Trilateral Dialogue

Kazami I sense a strong intrinsic motivation among TOYO employees. To harness this motivation, I believe it's crucial to clearly communicate the company's direction and align it with employees' aspirations and the work they want to pursue.

Clearly indicating the company's direction in the Medium-term Management Plan and aligning human resources to meet those goals forms the foundation of our current human resources portfolio.

Tominaga TOYO is exploring a variety of business directions under its medium- to long-term management policy. Our work is meaningful, supporting the future of society, and I believe we could highlight this sense of purpose and excitement even more. To that end, it's important to consistently share examples of our technological development and our community-driven initiatives through the intranet and other channels.

In my department, the Next Generation Technology Development Department (T-Next), we have established our own MVV (Mission, Vision, Values). Within this framework, we encourage everyone to "just move and keep on communicating." In business creation, the hierarchy we promote is: "talk with action" as the best, followed by "talk with no action," then "no talk and no action," with "no talk with action" being the least desirable. To foster innovation, it's crucial to involve others and communicate actively, rather than working in silence. Setting up this unique MVV aligns with the "groundwork" that Ms. Miyairi mentioned earlier.

An Organization that Continues to Learn and Develop Careers

Kazami Last year, the Human Resources Development Committee held discussions with relevant parties to define our ideal vision for talent capable of driving new businesses. We highlighted the need for individuals who can independently tackle new challenges from a strategic perspective, understand customer needs, and take proactive actions. Such individuals are expected to demonstrate their abilities in any business area they pursue.

For this reason, I believe we need talent that can gain a broad range of knowledge and experience and grow autonomously through practical work across different departments, rather than specializing in a single field.

Miyairi I fully support the President's vision of an "organization that continues to learn." Learning can take many forms, and as TOYO's roots are in the EPC business, we have an environment that supports learning from past experiences and from industry experts. However, it's equally important to learn from completely unfamiliar areas. For example, many companies have recently entered the space industry—not only to succeed in that field but also to inspire innovative thinking and bold actions among employees. Starting from a simple question, like "What is this?" can spark open, free-flowing conversations that naturally evolve into a community. New ideas are often born from allowing the mind to wander, and these initial sparks can reveal the seeds of potential business ventures.

Encouraging expert research and engaging with related professionals fosters what I would call "pioneering-style" learning—a proactive approach that explores new fields, distinct from passive learning. This kind of learning is essential for an organization committed to growth and innovation.

For an organization to create new value, I believe it must meet three conditions: autonomy, strong relationships, and high-quality discussions. The capacity for autonomous individuals to form connections and engage in meaningful dialogue is key. When such individuals come together, I believe it builds an organization capable of creating new businesses and uncovering fresh opportunities.

Kazami Ultimately, our human resources are our greatest assets. Our strength lies in building businesses with people as the foundation of our growth and in continuously enhancing our engineering services. The most important focus, therefore, is on nurturing both our people and our organization to achieve this. I want to carefully consider the types of human resource and career paths development that will support this goal and to continuously update our human resources strategies accordingly.

Miyairi In the society of the future, people will need to chart their own paths. They'll have to take charge of their career development, considering how their jobs fit into their broader life goals and taking responsibility for choosing their career steps and direction. To advance, it's essential to seize opportunities as they arise; without taking action, these opportunities will slip away. Usually, this requires preparation. Teaching people how to recognize and seize these opportunities is also important, in my view.

One way to do this is by sharing example cases. For instance, some individuals enhance their skills and expand their networks by taking MBA or other business courses on weekends or evenings, attending cross-industry networking events in the mornings, building networks, gathering information, and so forth. I believe it's important for the company to provide varied examples and create avenues for employees to access related information and opportunities.

Tominaga Having a "third place" outside of the company broadens people's perspectives. As their skills expand, so does the diversity of their behavior and thinking. I would like to see the company support pursuits like attending university to earn a doctorate.

Kazami In terms of supporting experiences and learning outside the company, we already provide many opportunities beyond the practical training at our workplaces and group companies. These include assignments to joint training programs within the group, participation in business schools sponsored by external organizations, and multi-industry leadership development programs. I hope to see these initiatives continue and expand.

New Work Styles and Work-Life Balance

Kazami As the company advances its diversity initiatives, I believe one of the key challenges will be to create a structure that supports a wide range of personal values, ethics, and outlooks on life. TOYO's Head Office relocation plan is a part of our commitment to strengthening human capital, and the concept behind the new office is to foster diverse work styles. We're encouraging flexible work arrangements that are not tied to a specific location. We hope this will inspire new work styles, creating a corporate culture at the Head Office that can then be adopted company-wide.

Miyairi As we progress from surface-level diversity—such as gender and race—toward deeper diversity, we need to establish work styles and organizational structures that reflect personal backgrounds, ways of thinking, and values. For instance, I would like to see the company create flexible organizational structures that enable fluid movement, utilizing departmental transfers and network-style setups where individuals can come together for specific projects.

TOYO is a company with a large international workforce, bringing diverse cultural customs and work styles. In this sense, I feel we've already built, and can continue to build on, a structure that values and respects work styles beyond the typical standards in Japan.

Kazami Collaboration with international colleagues is routine in our company. Even when there are significant cultural and environmental differences among group companies, it seems there is little awareness or focus on those differences. Our employees frequently interact with overseas group companies and customers, and personally, I rarely feel any discomfort regarding differences in values or ways of thinking. I believe there is a shared understanding within the company of the importance of adapting and adjusting to the environment as needed.

Tominaga That's a significant part of our company's culture and one of our strengths. This adaptability drives progress in our core EPC business, where our people bring incredible energy and collaboration to projects. However, will this remain effective 10 or 20 years from now? As the world rapidly changes, I believe it's crucial that we not only address emerging challenges but also periodically reevaluate and refresh our corporate culture with an eye toward the future.

Miyairi In the future, we may unlock new value by encouraging overseas group companies to bring forward innovative ideas they wish to pursue.

Kazami This discussion has reinforced for me that, to fully harness employees' sense of purpose, motivation, and capabilities, we need a personnel structure and environment that respects individual work styles and values. Achieving work-life balance remains a key focus of our human resources strategy. I want to move forward with initiatives that create opportunities and environments for learning, drawing on the ideas we've discussed today.

We'll also consider developing learning opportunities that step outside conventional boundaries, exploring entirely new areas and expanding our collective thinking.

Thank you all for a valuable discussion today.

TECHNOLOGY

Our History of Unremitting Efforts to Enhance Our Technical Capabilities

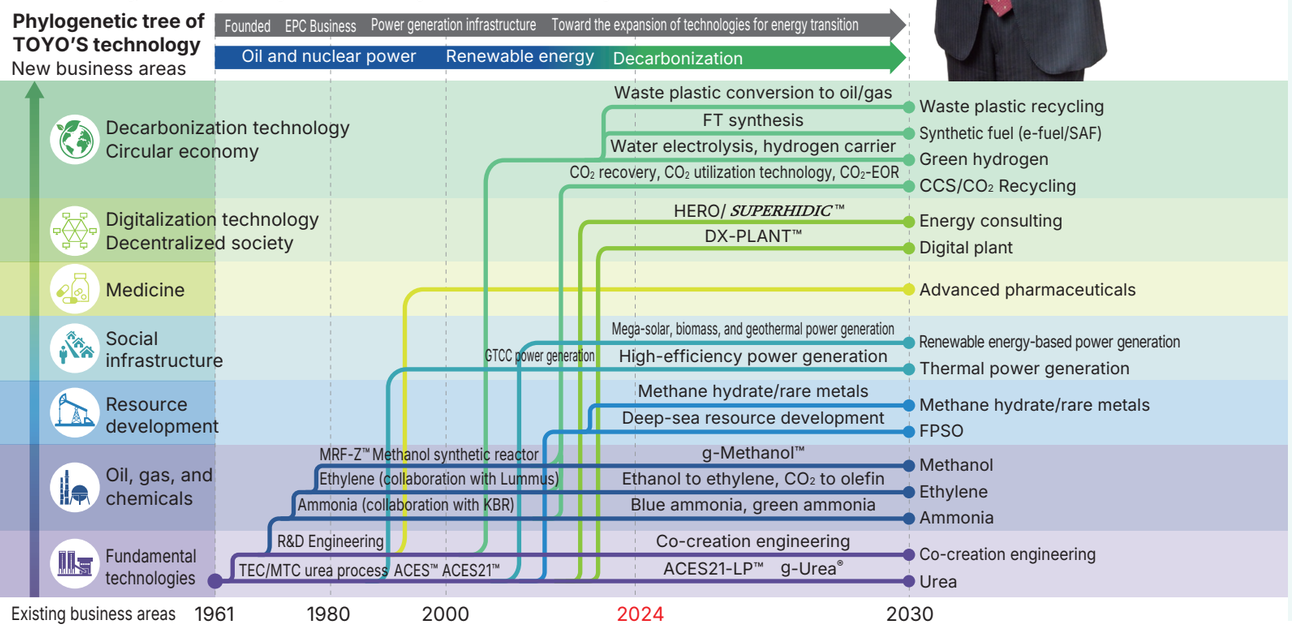
The history of our technology development can be broadly separated into proprietary technology development and the adoption of technologies from other companies. Our development of proprietary technologies began with the pursuit of energy-saving and larger-scale urea production equipment, our business area at the time of our founding. Through continuous technological development of processes and core equipment, we maintain and strengthen process performance that beats the competition. In the area of methanol manufacturing facilities, we have drawn on our equipment development technology to successfully develop energy-saving and high-performance reactors suited to large-scale equipment, leading to continued business with customers. In the adoption of technologies from other companies, we partner with licensors and equipment manufacturers in the fields of energy and environment to deliver equipment products that meet the needs of customers and society. Examples include systems for sulfur reduction in diesel fuel, distillation systems with high energy-saving efficiency, and LNG liquefaction effectively usable at small and medium-sized gas fields. In the area of ethylene and ammonia, in which we can boast a long history and numerous construction achievements as a licensee, we are honing our engineering and construction technologies through collaboration with licensors to achieve greater performance and scale.

We will acquire elemental technologies for the construction and operation of chemical product and energy production facilities and systems that minimize environmental impact and resource consumption, along with technologies for their integration and implementation.

Hiroshi Fujita
Senior Executive Officer
Chief Technology Officer (CTO)

In fiscal 2024, we reorganized our technology strategy in line with the time frames of our core businesses, growth businesses, and exploration business. Collaborating with outside partners and making use of the T-Labo new technology research center scheduled to go into operation during the current fiscal year, we will finally achieve social implementation of our decarbonization and resource-saving technologies. In our growth businesses aimed at full-scale social implementation, we will focus our efforts on next-generation urea production technologies, decarbonized fuel ammonia/hydrogen production and supply technologies, technologies for the production of green methanol as a ship fuel and chemical raw material, production of synthetic fuels through the FT reaction, and technologies for conversion of waste plastics to oil, among other technologies. In the exploration business, which involves long time scales leading to implementation, we will engage in full-scale development of technologies including the unique resource-saving technology of biomining and the electrolytic furnaces for ethylene production and current-carrying type electric furnaces that are a key to decarbonization in the chemical industry, in addition to low-temperature and low-pressure ammonia synthesis, small-scale distributed ammonia cracking, and other synthetic gas-related technologies in which we have strengths.

Phylogenetic tree of TOYO'S technology
New business areas



TOPICS

Low-cost urea production made possible by our status as a leading licensor of urea and technology that contribute to conservation of the global environment

Since its founding in 1961, TOYO has continued developing urea process technologies. We have leveraged our extensive knowledge and experience and our deep understanding of physical properties and material anti-corrosion in urea synthesis to achieve optimization of synthesis conditions, equipment, and piping materials that is then reflected in plant designs. Through this, we have achieved reductions in plant construction costs, energy consumption during production, and manufacturing and operation costs.

Existing ACES21™ fertilizer plant

01 Cost savings (compact)	02 Energy saving (Reduction of operating costs)	03 Ease and stability of operation	04 Reduction of maintenance costs
Reduction of construction costs and equipment costs	Realization of optimal synthesis conditions and high conversion	Forced circulation in a synthesis high-pressure loop	Avoidance of problems caused by corrosion

Urea licensing for Indonesian fertilizer plants

In fiscal 2023, we received a contract order to provide a urea license for a fertilizer plant with 2,750-ton per day capacity, to be built by PT Pupuk Sriwidjaja Palembang. We have constructed over 100 urea plants to date and have built up a respected track record of achievements in Indonesia.
Under TOYO's scope of responsibility, we plan the first application of our proprietary **ACES21-LP™ urea synthesis technology** in which we will provide licensing, basic engineering, partial equipment procurement, and technical services.

Key areas where TOYO's technology has contributed to the realization of a sustainable society!

- Fertilizers necessary for the production and stable supply of food contribute to increased food production in Indonesia.
- Reducing the energy used in urea production enables the reduction of carbon emissions from manufacturing.

New technology combining the conventional ACES21™ process concept with low-pressure synthesis technology

ACES21-LP™

01 Cost reduction through simplification of the urea synthesis scheme

Reduces plant construction costs and reduces operational costs through optimization of operating conditions

02 Innovation through low-pressure synthesis technology

Our low-pressure synthesis technology reduces power for raw material pressurization and enhances process efficiency, reducing energy consumption and costs.

Energy consumption 3 to 5% reduction

Cost of synthetic high-pressure equipment 5 to 10% reduction

03 Wide range of applications

Highly versatile technology applicable to both new and existing plants

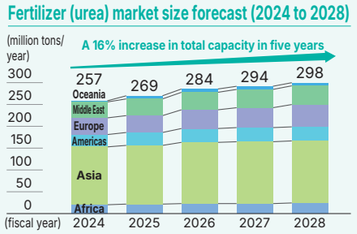
By constructing fertilizer plants that fully leverage the latest technologies, we meet the needs of countries worldwide while considering the global environment.

Urea and other chemical fertilizers are vital to the global production and stable supply of food. Achieving a carbon-neutral society will also demand the reduction of GHG emissions throughout the life cycle of fertilizers, from manufacturing to the post-application stage.

Future development

We are currently undertaking technical verification aimed at establishing urea manufacturing processes based on recovered CO_2

Fertilizer (urea) market size forecast (2024 to 2028)



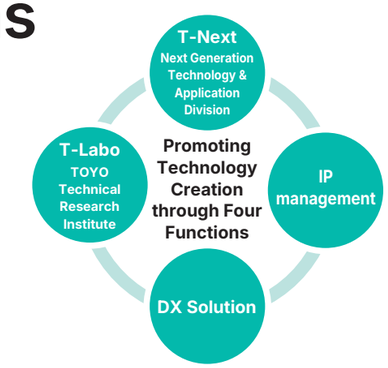
Source: Global Urea Capacity and Capital Expenditure Outlook, 2023-2030 by XENO BRAIN

Demand for fertilizers for food production is expected to continue growing in line with population, and numerous fertilizer plant construction projects are under planning worldwide.

TECHNOLOGY

Promoting Technology Creation through Four Functions

One source of TOYO's competitiveness lies in our technical capabilities. Intellectual capital is a form of non-financial capital for our Company, which does not hold manufacturing capital. It is a vital source of management capital on par with human capital. In advancing Sustainable Technology and Business Development strategy under our Medium-term Management Plan, we position the Intellectual property and licensing business as an important part of our strategic portfolio. In fiscal 2024, we carried out organizational reform that allows front-end engineering departments and the Intellectual Property Management Department to cooperate closely. By securing rights for intellectual property born in the process of new business development and implementing this property in society, we make contributions to society while expanding TOYO's profits. We will make further investments in research and development to promote technological innovation and will strategically engage in technology development and advancement of our intellectual property rights and business.



technology 01

T-Next

Advancing TOYO's next-generation technology development through a cadre of elite program leaders

T-Next Be a Trailblazer

In the Next Generation Technology & Application Division that leads TOYO's technology strategy, engineers with diverse areas of expertise act as program leaders to carry out technology development programs that encompass the investigation, adoption, and development of product technologies. We will build co-creative relationships with companies and research organizations aimed at the development and exploration of new technologies, and, by unifying our intellectual property, DX department, and other in-house resources, will promote projects aimed at next-generation technology development.

technology 02

T-Labo

Relocation and expansion of our technology research center to prepare an open space for co-creation with a fully-equipped environment

T-Labo!

Our new T-Labo technology research center is fully equipped with experimental and pilot facilities for deepening our technologies, developing next-generation technologies, and engaging in co-development with other companies. In addition to Advanced EPC Operation in our existing business fields, we have established strategies to promote next-generation energies including fuel ammonia, synthetic fuels, and SAF, along with Sustainable Technology and Business Development in circular and low-environmental-impact fields, under which we are advancing the development of numerous technologies.

technology 03

DX Solution

Development of IoT technology- and big data-based solutions matched to customer needs

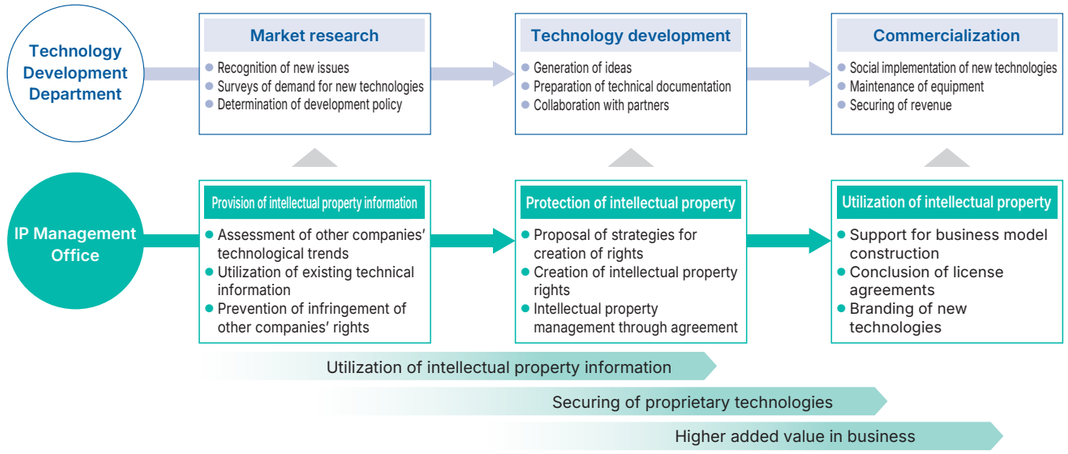
We are undertaking the development and operation of DX-PLANT™ facilities that will offer solutions through industrial IoT technology and AI analytical technology for big data, contributing to increased profit for the customers owning the plants. In developing digital solution products, we engage in rapid technology development under a seamless network organization to quickly develop and provide digital technologies that meet customers' needs and achieve work efficiency and cost reduction.

technology 04

IP Management Office

Leading the planning of intellectual property strategy, the securing and protection of intellectual property, and the construction of business models for co-creation

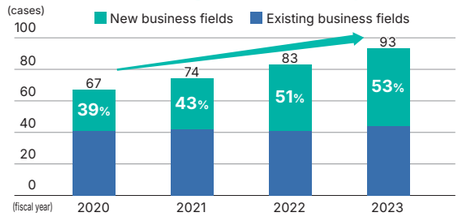
Through front-line activities in collaboration with the Technology Strategy Committee and the Technology Development Department, the office leads the creation and protection of intellectual property, from the stage of determining development policy to the stage of commercializing technologies. It aims for the development of proprietary technologies that form the Company's strengths, along with the conclusion of technology licensing agreements and the receipt of EPC orders. The office seeks to address social issues while elevating TOYO's business to a higher level of added value, achieving enhanced profit margin.



Protecting intangible assets and connecting them to new value

In recent years, TOYO has been increasing its patent applications in new business fields including decarbonization, circular society, and next-generation energy. We expect this trend to continue, contributing to growing revenue in new business fields. As patent rights generally expire 20 years from the date of application, protected patent technologies must be continuously improved and updated to protect and extend the life of patent rights. In existing business fields including urea, we work to protect and extend the life of patent rights and to maintain and enhance the value of our businesses by continuously applying for patents from multifaceted approaches, including equipment improvements, materials used, and equipment and process improvement technologies.

Ratio of new to existing business fields in patents held



* Number of patents held covers patent applications and patent rights. Applications in multiple countries for a single invention are counted as one case.

VOICE **Leading the creation and protection of intellectual property**

Protecting and nurturing intellectual property under a medium- and long-term vision

As a member of the IP Management Office licensing team, I work on the design and implementation of joint development agreements and technology demonstration agreements for the utilization of core technology intellectual property and for the protection and co-creation of intellectual property through confidentiality agreements. As examples of our work, we patent and license intellectual property through co-creation that combines and crosses our technologies and know-how with the technologies of other companies, and conclude agreements following discussions to delineate the parties' respective rights. We determine patent right proportions on the basis of their relative degrees of contribution to technology development. In the conduct of business, we determine each party's strengths in terms of business fields, countries, areas, and so on, for which the accumulation of logic and negotiation are vital. Licensing is greatly influenced by current trends, as seen in the many carbon neutrality-related inquiries we have received in recent years. To protect and nurture patents, it is important that we hold a medium- to long-term vision and that we verify current contract details and patent technologies from a future-oriented perspective.

Michiko Nakajo
IP Management Office

GLOBAL NETWORK

Global Network Capabilities for Engaging in Engineering with Regional Roots

1 India (Toyo-India)

Toyo-India is engaged in engineering, procurement, and construction work for diverse large-scale projects spanning fertilizers, ethylene, FPSO, LNG regasification facilities, and refineries. It has the largest number of engineers in the TOYO Group and has established a leading position, particularly in LNG regasification facilities. Toyo-India functions as a vital core hub for global projects.

Since establishment	Number of projects	Number of employees
48 years	600 *1	2,253 *2

Areas of focus

- Initiatives for business development in the decarbonization field in India, in collaboration with Toyo-Japan
- Initiatives for the oil refining and petrochemical-related EPC projects and consulting businesses in India
- Execution of urea and ammonia projects by project organizations led by Toyo-India human resources

2 Malaysia (Toyo-Malaysia)

Toyo-Malaysia has comprehensive EPC functions, is widely knowledgeable about local partner companies and local laws, regulations, and permits, and is capable of one-stop optimal project execution based on its extensive track record.

Since establishment	Number of projects	Number of employees
38 years	150	295 *2

Areas of focus

- FEED implementation for SAF manufacturing plant by a Malaysian company (scheduled to advance to EPC)
- Signing of an MOU with the state government of Sarawak regarding a study of the decarbonization value chain
- Accident- and incident-free completion of the construction of high-value-added chemical plants for Japanese and foreign companies

3 Indonesia (IKPT)

Within Indonesia's EPC sectors, IKPT has earned a high reputation in the oil and gas sector, petrochemicals sector, and more recently the power generation sector, geothermal power plants in particular. The company has evolved its project management through standardization of work procedures, utilization of its global network, and application of the latest technology. It holds a strength in its outstanding human resources, including engineers and project managers with advanced expertise, and is enhancing employees' skills and knowledge through continuous field training, human resource development programs, and other means.

Since establishment	Number of projects	Number of employees
42 years	93 *1	673

Areas of focus

- Promotion of networking and strengthening of relationships with stakeholders and customers
- Digitalization of engineering work
- Strengthening of risk management

4 Japan (TEC Project Services (TPS))

With single-use technologies and other advanced technologies, TPS has earned a strong position and recognition within the industry and among customers in the pharmaceuticals and fine chemicals fields, particularly in the biopharmaceuticals field.

Since establishment	Number of projects	Number of employees
37 years	132 *1, 3	235 *2

Areas of focus

- Growth in the pharmaceutical fine chemicals business (TPS overall sales: FY2022 30% ⇒ FY2023 60%)
- Securing of profit in the maintenance business (regular repair work, routine maintenance) (34% of TPS total gross profit (17% of sales))
- Setting of vision and value through the "Asunaro Project"

5 South Korea (Toyo-Korea)

In addition to experience in executing numerous projects in the petrochemical field together with domestic and overseas licensors and customers, Toyo-Korea has worked on projects in the field of semiconductor materials production with domestic and overseas customers investing in South Korea. As a professional engineering company, Toyo-Korea has high-level engineers capable of meeting customers' requirements and provides wide-ranging engineering services across all processes, from feasibility studies to EPC project implementation.

Since establishment	Number of projects	Number of employees
37 years	111 *1	334 *2

Areas of focus

- Execution of large petrochemical projects
- Entry into the markets for eco-friendly plants/equipment and for secondary batteries
- Entry in preparation for positive cycles in the semiconductor industry

6 China (Toyo-China)

With a Chinese government-certified Class A engineering license enabling the execution of large-scale projects, Toyo-China has an extensive track record of over 300 projects. It also provides world-class engineering services that draw on its advanced technologies and expertise. By completing projects with high customer satisfaction, the company has won a high repeat order rate from its existing customers.

Since establishment	Number of projects	Number of employees
20 years	300 *1	407 *2

Areas of focus

- Enhancement of work efficiency to increase competitiveness in the Chinese market
- Development and advancement of business opportunities in the field of green energy

7 Brazil (TSPI)

Utilizing its locally hired experts in engineering, procurement, and construction, TSPI has executed difficult projects. The company operates in a variety of fields, where it provides consistent, valuable engineering solutions to its clients.

Since establishment	Number of projects	Number of employees
12 years	24 *1	1,727 *2

Areas of focus

- Initiatives aimed at low-carbon business opportunities leveraging Brazil's strategic position, while maintaining a strong position in oil, gas, and electricity markets
- Continuous enhancement of safety standards through ongoing implementation of training and drills, including an HSE campaign encouraging workers to halt when uncertain about actions

8 Singapore (OFS)

In the FPSO market, OFS has established a joint venture with MODEC, one of the top two companies sharing the market, and has built a structure for executing EPCI in FPSO.

Since establishment	Number of projects	Number of people on temporary assignment from TOYO
2 years	2 *1 (Number of EPCI projects)	39 *2

Areas of focus

- Two EPCI projects underway in Guyana for ExxonMobil and in Brazil for Equinor
- FEED underway for the next-fiscal-year Gato do Mato project for Shell.

*1 Cumulative number of projects since establishment, including engineering work and other service projects *2 As of March 31, 2024 *3 From FY2016 to the end of FY2023

GLOBAL NETWORK

1 India

INDIA

While maintaining India-based oil- and petrochemical-related projects as our core, we are carrying out initiatives in the decarbonization- and green-related fields. We have also begun implementing Advanced Work Packaging (AWP), a DX service, into projects, and are promoting initiatives to improve income and expenditure balance through advanced construction planning management.

Diesel fuel oil hydrogenation refining equipment for NRL

External environment

Demand for oil and petrochemical products is robust in India, and ultra-large projects are planned or underway throughout the country. At the same time, there is also a growing movement among companies to seek business opportunities for hydrogen production using renewable energy, with accompanying production of ammonia and methanol.

Area of expertise

In the decarbonization field where growth is expected, Toyo-India will demonstrate and leverage its technical capabilities, EPC execution capabilities, and consulting capabilities to achieve environmentally friendly projects.

Targeted stage

We will strengthen our technical support capabilities in the carbon neutrality field, and through the utilization of DXoT will build the most advanced, highly efficient EPC execution structure.

2 Malaysia

MALAYSIA

External environment

Highly dependent on foreign demand, Malaysia is greatly affected by the global political instability and the unstable supply and demand of recent years. To overcome these issues, decarbonization and a shift to higher added value in the industry are set as goals at the state level. We expect numerous opportunities for our company to contribute.

Area of expertise

Based on our track record and knowledge gained in the construction of numerous plants for diverse customers, we will provide optimal solutions aimed at higher added value and low carbon.

Targeted stage

By providing a variety of technologies to diverse customers and by further widening our business portfolio, we will enhance our presence and support endeavors by the industry.

From the study and basic design stage onward, we are contributing to projects for the creation of added value in gas and downstream products and projects for decarbonization, aimed at realizing the National Energy Policy (2022) and the Energy Transition Roadmap (2023) announced by the government.

Wastewater Treatment Plant (WWTP) Modification Project

3 Indonesia

INDONESIA

We have focused on the promotion and strengthening of strategic networking with stakeholders in target sectors including renewable and green energy, decarbonization, and the circular economy. In 2023, we continued implementing the DXoT program and moved forward with the strengthening of our information security management and systems, the introduction of a new feedback knowledge management system (FKMS), promotion of project twin development, cooperative application development with the Head Office, and 3D model presentation development using Building Information Management System (BIM) technology.

Sulfuric acid plant for PT Smelting

External environment

Indonesia faces the prospect of downswings in economic growth forecasts due to external factors such as the intensification of conflict in the Middle East. Careful risk management and project management are increasingly important, given the potential for financial risks and geopolitical tensions to disrupt global supply chains. However, electricity demand is predicted to continue growing in 2024 due to the completion of new smelters and oil refineries, the expansion of industrial zones, and the electrification of transportation. In addition to conventional energy resources, the transition to green energy is expected to further progress.

Area of expertise

Through strategic cooperation with technical partners, IKPT will actively pursue further development of geothermal power plants. This initiative will contribute to the local government's goal of raising the percentage of renewable energy in the energy mix to 23% by 2025. IKPT is also undertaking a PET recycling project as a component of the circular economy sector.

Targeted stage

We will distribute risks by diversifying our portfolio to encompass medium-sized petrochemical plants, in addition to the renewable energy and power sectors. We also aim for further market penetration in the decarbonization sector and, through cooperation with strategic partners, seek to participate in project development from the early FS and FEED stages onward.

4 Japan

JAPAN

External environment

Domestic investment appetite is robust, with the fields of functional chemicals and semiconductors as growth areas. At the same time, soaring materials prices and soaring labor costs due to labor shortages have created gaps between customer budgets and project estimates, resulting in reviews of project scale and delays in FID.

Area of expertise

In the pharmaceutical field, we are leveraging our sales cooperation relationship with TAISEI Corporation to strengthen joint order receipts. We also seek to receive EPC orders for the iFactory® that we have jointly developed. In the fields of functional chemicals and semiconductors, we will connect FS, basic engineering, and other services for existing major chemical companies to the receipt of EPC orders.

Targeted stage

Our target is 1 billion yen in net income by 2025 and 1.5 billion yen in 2030. We also aim to achieve zero lost-time incidents and no-lost-time incidents. In the long term, we intend to enact measures in line with our Vision of "Compact and Impactful," specialize in the business areas that are our strengths, and improve per-person profit.

In the pharmaceutical fine chemicals business, we completed a biopharmaceutical active ingredient manufacturing building and received a Facility of the Year Award from the International Society for Pharmaceutical Engineering. In the maintenance business, regular repair work supported profit in fiscal 2023.

Biopharmaceutical Active Ingredient Manufacturing Building Project

GLOBAL NETWORK

5 South Korea

KOREA

Toyo-Korea participated in and executed the S-Oil Shaheen project as one of its contractors. To enter the market for eco-friendly plants and equipment, the company participated in bidding for a new plastic recycling plant and carried out projects related to S-Oil's eco-wastewater treatment plant and denitration equipment. We also dispatched human resources to a kiln facility construction project for secondary batteries and carried out an EPC project involving a battery separator coating plant. To ensure competitiveness when the semiconductor market shifts from its current downturn to a positive cycle, we will actively participate in bidding on basic and detailed engineering projects for semiconductor manufacturing materials plants.

Wastewater treatment facility for S-Oil

External environment

While we hold expectations for investments in high-value-added and high-performance product manufacturing equipment in South Korea, investments in petrochemical projects are shifting to the Middle East. As investments in semiconductor-related materials manufacturing plants, eco-friendly equipment, and secondary battery-related materials manufacturing equipment are projected to increase steadily, rational risk analysis and active participation in new projects are necessary.

Area of expertise

Drawing on the design expertise that allows us to execute engineering for diverse processes and our outstanding business management capabilities for carrying out multiple projects, we will take part from customers' investment planning stage onward and meet needs for design, project scheduling, and acquisition of government approvals, offering a one-stop solution that carries EPC through to completion.

Targeted stage

We aim to actively participate in small and medium-sized new investment projects domestically and overseas, and to win orders for single projects. In large-scale projects, we will secure opportunities for participation as a consortium partner of major EPC contractors or as a process unit subcontractor, allowing us to demonstrate our expertise.

6 China

CHINA

External environment

In the Chinese market, the external environment is becoming more difficult. However, while foreign investment gradually decreases, domestic investment continues to grow.

Area of expertise

We will expand new business areas, particularly those related to CO_2 reduction or other aspects of carbon neutrality. Toyo-China's track record and achievements are rated highly by customers and local authorities, ensuring a certain advantage in capturing new business opportunities.

Targeted stage

We will maintain outstanding performance in existing projects and continue to earn customers' trust. We will also enhance operational efficiency by utilizing DXoT solutions to optimize work procedures. In addition, we will enhance the comprehensive capabilities of employees through workplace training and Lessons Learnt workshops.

Toyo-China has achieved its net income target and new order target for fiscal 2023. We have also succeeded in increasing new customers and are capturing repeat orders from existing customers. All of our ongoing EPC and EPsCm projects are progressing steadily, with positive evaluations from customers. We have also achieved over 6 million incident-free work hours in 2023.

Lithium hydroxide manufacturing facility

7 Brazil

BRAZIL

In fiscal 2023, the local global network TSPI will explore new positioning aimed at future growth through the creation of new opportunities in emerging markets. We are also working to improve and enhance safety standards through advanced training programs and an HSE campaign encouraging workers to halt when uncertain about actions. These initiatives are forming a foundation for the assurance of safety, achievement of excellence in work, and solutions to social issues through business.

FPSO MV32
Module Fabrication Project

External environment

Renewable sources of energy account for 85% of Brazil's electrical power composition, and the country is advancing global efforts aimed at energy conversion and decarbonization. Accordingly, major opportunities are appearing in the development of low-carbon raw materials and bio-fuels. By combining advanced engineering services and cutting-edge technologies with deep local knowledge of EPC, TSPI is in an advantageous position to capitalize on opportunities in the low-carbon market. In addition, competition for EPC contractors is not fierce in Brazil at present, which also enhances the competitiveness of TSPI.

Area of expertise

Leveraging our knowledge of EPC work execution that makes use of locally hired staff, TSPI aims to diversify and strengthen its presence in the market through technical excellence and innovation.

Targeted stage

We will focus on enhancing our project execution and management capabilities, and will complete ongoing projects according to plans. We will also emphasize business development activities aimed at expanding opportunities in the market for bio-fuels and other low-carbon fuels, while capturing stable opportunities in existing markets.

8 Singapore

SINGAPORE

External environment

Despite the major trend toward carbon neutrality, investment appetite is robust among the oil majors and demand in the FPSO market is strong. We expect numerous project inquiries through around 2030.

Area of expertise

Making the most of the position of one of the world's top two companies, we will engage in selection of superior projects and steadily win project orders.

Targeted stage

While simultaneously executing existing projects and reforming the EPCI execution process, we aim to build a muscular organization and become a highly profitable company on the premise of winning one project order per year.

In Guyana and Brazil, we launched EPCI projects ordered in fiscal 2023. We are steadily carrying these forward while overcoming various challenges.

FPSO for the Guyana Uaru Project

CORPORATE GOVERNANCE

CORPORATE GOVERNANCE

List of Officers

DIRECTORS AND AUDIT & SUPERVISORY BOARD MEMBERS

As of July 1, 2024

Directors

1 Haruo Nagamatsu Chairman

• Years in office as Director 7 years • Attendance at Board of Directors meetings 16/16 (100%)

Reason for appointment Mr. Nagamatsu has served as a representative of a subsidiary and as Representative Director and President & CEO of the Company for many years. He possesses extensive experience and high-level insight in project management and company management. He has served as Chairman of the Board of Directors since 2023 and conducts appropriate management of proceedings as the Chair of Board of Directors meetings.

2 Eiji Hosoi Representative Director, President & Chief Executive Officer

• Years in office as Director 1 year • Attendance at Board of Directors meetings 13/13 (100%)

Reason for appointment Mr. Hosoi has served as the representative of a subsidiary and as Unit Director of the Plant Business Unit. He possesses extensive experience and high-level insight concerning the "Sustainable Technology and Business Development" and "Advanced EPC Operation" areas set out in the Medium-term Management Plan. Since 2023, he has demonstrated leadership as the Company's Representative Director and President & CEO.

3 Noriyoshi Torigoe Representative Director, Executive Vice President, CCO

• Years in office as Director 3 years 11 months • Attendance at Board of Directors meetings 16/16 (100%)

Reason for appointment Mr. Torigoe has many years of work experience in governmental financial institutions and extensive experience and wide-ranging insight in infrastructure-related businesses. He became an Executive Vice President of the Company in 2023 and the Representative Director in 2024. He actively provides opinions and suggestions on the drafting and deliberation of management strategies, and engages in management of the Company.

4 Masayuki Yoshizawa Director, Executive Vice President

• Years in office as Director 9 years • Attendance at Board of Directors meetings 16/16 (100%)

Reason for appointment Mr. Yoshizawa worked for many years in a general trading company and possesses extensive experience and high-level insight concerning the Company's business, including business investment in the energy and infrastructure fields, EPC business, and management of overseas companies. He became an Executive Vice President of the Company in 2019, and has overseen the management of the Company from a position of promoting work reform.

5 Kensuke Waki Director, Senior Executive Officer, Chief Financial Officer

• Years in office as Director 6 years • Attendance at Board of Directors meetings 16/16 (100%)

Reason for appointment Mr. Waki has served as the head of the Company's Accounting and Finance Division and possesses extensive experience and high-level insight concerning finance and accounting. He became Chief Financial Officer of the Company in 2017 and was appointed Director and Senior Executive Officer in 2023. He engages in management of the Company from a position in charge of the Accounting and Finance Division.

Outside Director

6 Masami Tashiro Outside Director, Independent Officer

• Years in office as Director 9 years • Attendance at Board of Directors meetings 14/16 (87.5%)

Reason for appointment Mr. Tashiro has long international work experience in financial institutions and possesses extensive experience and high-level insight as a manager. He provides accurate observations and opinions from an independent standpoint and a global perspective, and ably oversees the Company's management overall.

7 Reijiro Yamamoto Outside Director

• Years in office as Director 5 years 4 months • Attendance at Board of Directors meetings 16/16 (100%)

Reason for appointment Mr. Yamamoto has served as a manager at an investment fund management firm and a manager of various business companies, possesses extensive experience and high-level insight concerning finance and corporate management, and ably oversees the Company's management.

8 Tatsuya Terazawa Outside Director, Independent Officer

• Years in office as Director 3 years 11 months • Attendance at Board of Directors meetings 16/16 (100%)

Reason for appointment Mr. Terazawa has worked in the Ministry of Economy, Trade and Industry for many years and possesses extensive experience and high-level insight concerning government administration, primarily in the areas of trade policy and trade promotion. As Chairman and CEO of The Institute of Energy Economics, Japan, he possesses wide-ranging knowledge of trends in carbon neutrality and the international energy situation and ably oversees the Company's management.

9 Sayoko Miyairi Outside Director, Independent Officer

• Years in office as Director 3 years 11 months • Attendance at Board of Directors meetings 16/16 (100%)

Reason for appointment Ms. Miyairi has extensive practical experience and management experience in a consulting firm, as well as extensive expert knowledge as a university professor. Leveraging these qualities, she provides fair and accurate observations and opinions from an independent standpoint and ably oversees the Company's management.

See details of Officers here

Audit & Supervisory Board Member

Toshihiko Nemura Audit & Supervisory Board Member

• Years in office as audit & supervisory board member 2 years
• Attendance at Board of Directors meetings 16/16 (100%)
• Attendance at Audit & Supervisory Board meetings 19/19 (100%)

Reason for appointment Mr. Nemura has been involved in the Engineering Division for many years, serving as a director of an overseas company and the head of the Marketing Division and the Internal Audit Division. He possesses extensive experience and high-level insight into technology, management, and internal audits. He leverages his experience and insight in ably conducting audits of the Company's management.

Hiroshi Yoshida Audit & Supervisory Board Member

• Newly appointed

Reason for appointment Mr. Yoshida has served as the head of the Company's Finance Division for many years and possesses extensive experience and high-level insight concerning finance and accounting. The Company anticipates that he will use his experience and insight in ably conducting audits.

Hideki Matsuo Outside Audit & Supervisory Board Member, Independent Officer

• Years in office as audit & supervisory board member 2 years
• Attendance at Board of Directors meetings 16/16 (100%)
• Attendance at Audit & Supervisory Board meetings 18/19 (94.7%)

Reason for appointment Mr. Matsuo has many years of management involvement in the chemical industry, which is deeply connected to our Company. He possesses extensive experience and high-level insight concerning management. Leveraging these qualities, he provides fair and accurate observations and opinions from an independent standpoint and ably conducts audits of the Company's management.

Takako Miyoshi Outside Audit & Supervisory Board Member, Independent Officer

• Years in office as audit & supervisory board member 1 years
• Attendance at Board of Directors meetings 13/13 (100%)
• Attendance at Audit & Supervisory Board meetings 13/13 (100%)

Reason for appointment Based on her knowledge and experience as an attorney, Ms. Miyoshi provides fair and accurate observations and opinions from an independent standpoint and ably conducts audits of the Company's management.

See our Corporate Governance Guidelines here

Initiatives to Strengthen Governance

Basic approach to corporate governance

With "Engineering for Sustainable Growth of the Global Community" as its mission, TOYO aims to elevate its sustainability as a company along with its medium- and long-term corporate value and shareholder value. We will also work on enhancing our corporate governance, the foundation for realizing those aims. Specifically, we will make efforts to establish and operate a corporate governance structure, perform appropriate risk-taking and management, enforce compliance, and engage in active disclosure of information and dialogues with stakeholders.

Appointment of Outside Directors

We appoint Outside Directors who possess superb insight and abundant experience in various fields, including management of global corporations, accounting and finance, human resources management, and legal affairs. These individuals are able to take an overview of our entire management and to provide practical and objective opinions and advice from the perspective of diverse stakeholders. In line with the criteria for the independence of outside directors prescribed by the Tokyo Stock Exchange, three of our four Outside Directors are Independent Officers.

Ensuring the diversity of the Board of Directors and the Audit & Supervisory Board

We appointed a female Director in fiscal 2020 and a female Audit & Supervisory Board Member in fiscal 2023. We will continue our efforts to ensure the diversity of the Board of Directors in aspects including gender, nationality, career history, and age.

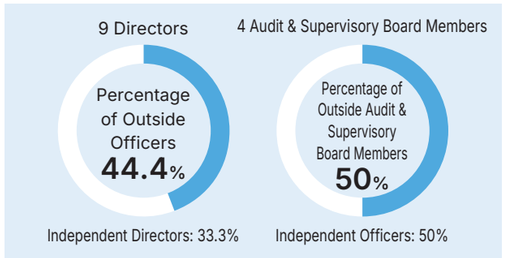
Appointment of Outside Audit & Supervisory Board Members

We appoint Outside Auditors who possess superb insight and extensive experience in various fields. These individuals are able to take a high-level view of our management overall and appropriately audit the adequacy of the execution of duties and work by Directors.

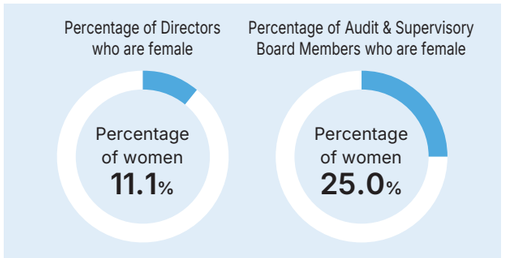
Outside Officer System and Operation

Our Outside Officers provide opinions from the perspective of external stakeholders, which we believe helps ensure the accountability of our corporate executives and contributes to management transparency. In light of the business content and structure of our Company, we are confident that our current Outside Officer system is effective in ensuring that our corporate governance functions as intended. To ensure that our Outside Officers provide effective supervision of our corporate management, we conduct briefings on agenda items ahead of Board of Directors meetings as a means of enhancing the day's discussions.

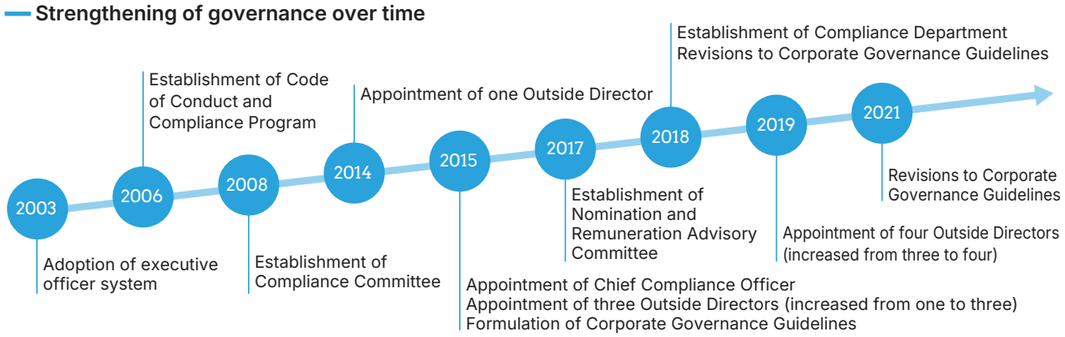
Percentages of Outside Officers on the Board of Directors/Audit & Supervisory Board



Percentage of Board of Directors/ Audit & Supervisory Board Members who are female



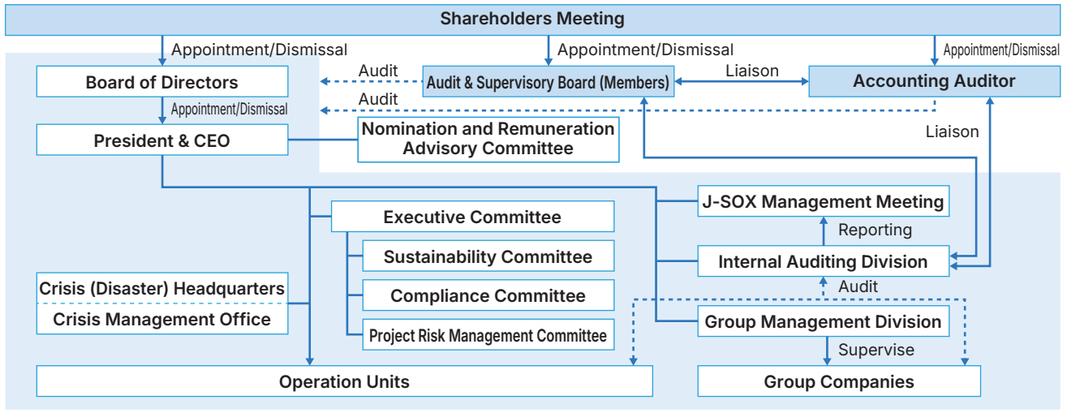
Strengthening of governance over time



Corporate Governance System

In gaining the trust of shareholders, customers, and other stakeholders and in fulfilling our corporate social responsibilities, TOYO recognizes the importance of ensuring transparency and fairness in our management decision-making. Accordingly, we have built the following corporate governance system and are working to further enhance its operation. The Board of Directors comprises nine Directors, including four Outside Directors, who deliberate and determine all important matters related to management and to execution of operation, while also monitoring and supervising one another with respect to the execution of duties. We also employ an executive officer system for the purpose of guaranteeing a swift and efficient system of business execution. Executive Officers are appointed by the Board of Directors and execute their delegated duties under the direction of the CEO. The Executive Committee, an advisory body to the President & CEO, consists of Executive Officers with specific roles (Senior Executive Officers or above) and the heads of key divisions. The Executive Committee reports and deliberates on important matters related to the execution of business. The Nomination and Remuneration Advisory Committee, consisting of the President & CEO and Outside Officers, also serves as an advisory body to the President & CEO. It works to ensure fair and transparent officer appointment and remuneration by providing opinions to the President & CEO. The Audit & Supervisory Board consists of four members, two of which are Outside Auditors. The board deliberates and reports on the execution of duties by Directors, the establishment and implementation of internal controls, internal audit guidelines for quarterly and year-end results, and the details and findings of audits.

See our Corporate Governance Report here



Internal Controls

Based on the recognition that internal controls serve as the foundation of corporate governance, our Directors establish, maintain, and evaluate appropriate internal control systems, implement ongoing inspections and improvements, and conduct periodic reviews of basic policy for internal controls. While ensuring the reliability of compliance, risk management, and financial reports through internal controls, we also fully pay heed to the effectiveness and efficiency of operations. We have established a structure by which the Board of Directors draws on appropriate information to engage in decision-making, based on which business is executed.

See our Basic Policy on Internal Control Systems here

Auditing by Internal Auditing Division and Audit & Supervisory Board Members

TOYO has established an Internal Auditing Division directly under the President & CEO. The Internal Auditing Division assesses the legality and rationality of the Company's operations and provides advice and counsel regarding operational effectiveness and efficiency. It independently assesses the maintenance and operation of internal controls related to financial reports and reports findings to the J-SOX Committee directly under the President & CEO, then to the Board of Directors. It further reports on the status of internal audits to the Audit & Supervisory Board four times a year under a dual reporting line.

Audit & Supervisory Board Members audit Directors' execution of duties through attendance at Board of Directors and other key meetings, through interviews with Directors, Executive Officers, and employees on the status of operations and the execution of duties, and through investigation of the state of the Company's operations and finances.

The Audit & Supervisory Board, Accounting Auditors, and the Internal Auditing Division, with full consideration of mutual independence, collaborate through close communication in the conduct of audits by providing explanations of observations concerning the Company's operations and exchanging opinions on matters including respective annual audit plans, critical audit items, auditing methods, screening and quality control systems, and audit findings.

Skill Matrix and Evaluation of the Effectiveness of the Board of Directors

Skill Matrix of Directors and Audit & Supervisory Board Members

TOYO engages in business around the world, with countries other than Japan accounting for high percentages of both net sales and total employees. Global corporate management skills are vital for TOYO in achieving its mission of providing "Engineering for Sustainable Growth of the Global Community." Project management knowledge and experience are also important in managing and supervising TOYO's core business, which involves the implementation of diverse projects in parallel. Moreover, knowledge of technology, R&D, and other industries is vital for developing and integrating new technologies and elemental technologies and for socially implementing these in the form of production facilities (plants) in varied business fields.

Accordingly, TOYO has created a skill matrix covering basic items required in its corporate management, including accounting/finance, HR/labor, legal and regulatory, sales marketing, and industry knowledge, as well as global corporate management, project management, technology/R&D, and knowledge of other industries.

Name	Haruo Nagamatsu	Eiji Hosoi	Noriyoshi Torigoe	Masayuki Yoshizawa	Kensuke Waki	Masami Tashiro	Reijiro Yamamoto	Tatsuya Terazawa	Sayoko Miyairi	Toshihiko Nemura	Hiroshi Yoshida	Hideki Matsuo	Takako Miyoshi
Positions	Chairman	Representative Director, President & Chief Executive Officer	Representative Director, Executive Vice President, CCO	Director, Executive Vice President	Director, Senior Executive Officer, CFO	Outside Director	Outside Director	Outside Director	Outside Director	Audit & Supervisory Board Member	Audit & Supervisory Board Member	Outside Audit & Supervisory Board Member	Outside Audit & Supervisory Board Member
Global corporate management	●	●		●		●	●					●	
Accounting/ finance			●		●	●	●				●		
HR/labor					●				●				
Legal and regulatory			●					●					●
Technology/R&D	●									●		●	
Project Management	●	●								●			
Sales and marketing		●		●									
Industry knowledge	●	●	●	●	●					●	●	●	
Knowledge of other industries			●	●		●	●	●	●			●	●

Note: The table above shows the specialized knowledge and experience held by Directors and Audit & Supervisory Board Members. (Up to four items per person)

Evaluation of the Effectiveness of the Board of Directors

TOYO regularly evaluates and analyses its Board of Directors to enhance its efficacy, and discloses summaries of the procedures and findings thereof. In December 2023, we conducted a survey of all Directors and Audit & Supervisory Board Members that make up the Board of Directors. Drawing on this survey, the January 2023 regular meeting of the Board of Directors engaged in analysis, discussion, and evaluation. Below are key findings.

Method of evaluation

- Respondents: All Directors and Audit & Supervisory Board Members (9 Directors; 4 Audit & Supervisory Board Members; 13 in total)
- Method of response: 37 multiple-choice questions on a five-point scale; 8 written questions; 45 questions in total
- Items evaluated: Composition and operation of the Board of Directors, support structure for Officers, training for Officers, dialogue with shareholders, and own efforts

Initiative policy for FY2023	Achievements and evaluations for FY2023	Initiative policy for FY2024
● We will flesh out dialogues with investors and shareholders, enhance our media public relations, and expand discussions within the Board of Directors. ● We will enhance opportunities to provide information on TOYO's business to Outside Officers and will enhance communication with executive members to energize discussions within the Board of Directors and the Nomination and Remuneration Advisory Committee.	● We established a strategic public relations conference to carry out discussions and measures related to public relations activities and to report on PR and IR activities to the Board of Directors twice a year, expanding opportunities for discussion. ● We held business reporting sessions and enhanced the provision of information through the creation of opportunities for communication with domestic executive members and the sharing of divisions' work status, which has resulted in positive evaluation. ● Expansion of discussions on medium- and long-term management and risk strategies was requested.	● By expanding opportunities for risk strategy-related discussions inside and outside the Board of Directors, we will work to strengthen governance in terms of both offense and defense. ● We will broaden the scope of business reporting sessions to encompass overseas group companies, and will further energize discussions within the Board of Directors and the Nomination and Remuneration Advisory Committee.

Content of Discussions by the Board of Directors

In addition to medium- and long-term management plans and asset plans, our Board of Directors primarily discusses basic policies and risk countermeasures related to important projects, reflecting TOYO's nature as an engineering company.

FY2023 proposals (summary)		
	Management and strategy	Officer-related personnel matters
		Status of progress of order receipt activities and projects
		Basic policies for major projects
		Status of group companies
		Status of implementation of internal control and compliance
		Matters related to financial statements and Shareholders Meetings
		Reports on public relations and IR activities
	Governance	Inspection of cross shareholdings
		Analysis of the exercise of voting rights at Shareholders Meetings
		Evaluation of the Effectiveness of the Board of Directors
	Sustainability	Sustainability-related matters (including human rights and environmental fields)

TOYO as seen by Outside Directors

Evaluating the Robust Governance System Established through the PDCA Cycle

Q How do you evaluate the progress of TOYO's governance?

I believe that TOYO has reached a strong standing as an engineering company as a result of continuous efforts over the past decade to deepen and enhance governance. In particular, TOYO has made notable improvements in appropriate risk-taking and risk management. Building on past lessons, the Company has developed robust mechanisms that ensure effective control through a layered management structure and a comprehensive check system. This governance approach has been a key driver behind our stable profitability in recent years.

Masami Tashiro

Appointed in 2015

Q What efforts are required of TOYO, whose mission is "Engineering for Sustainable Growth of the Global Community"?

I believe that TOYO's mission requires us to integrate and optimize a wide range of elemental technologies—a capability achievable only through our engineering expertise, experience, and know-how. Ultimately, this approach empowers us to deliver optimal solutions for the earth and society. Thus, I think what is most expected of TOYO is to fully leverage our comprehensive capabilities to effectively address the needs of our customers and society.

Expectations for Monetizing New Business Areas and Realizing Results from DX Investments

Q In the fourth year of the Medium-term Management Plan, how do you evaluate the initiatives undertaken so far?

In fiscal 2023, net income from core business operations reached 5 billion yen. We achieved our KGI of an average 5 billion yen for fiscal years 2023 to 2025, and profit growth is progressing smoothly. A significant positive outcome was the resumption of dividend payments for the first time in seven fiscal years. This achievement was supported by the high gross profit contribution from non-EPC projects, which accounted for 58% and had strong profit margins. However, gross profit from new business areas remains at 9%, indicating there is still progress to be made.

Reijiro Yamamoto

Appointed in 2019

Q What do you think needs to be strengthened to accelerate progress toward the final year, 2025?

I believe the outcomes from our DX investments remain insufficient. We need to accelerate the application of DX across projects and translate this into an improved profit margin for our EPC projects. In terms of new business areas, we are advancing preparations, including FS and pre-FEED services. I would like the Company to collaborate with customers and partners to leverage government subsidy programs and, primarily through technology partnerships, to expedite the establishment of EPC projects.

Going forward, TOYO will need to further invest in new business fields and work to diversify its profit structure. Drawing on my experience, I intend to contribute through Board discussions and other channels to support TOYO's sustainable growth.

Strengthening Our Capacity to Address New Risks Arising from Business Expansion and Changing Social Conditions

Q How do you evaluate TOYO's initiatives toward carbon neutrality?

By taking a leading role in supplying low-carbon ammonia, TOYO provides valuable decarbonization solutions for so-called "hard-to-abate sectors"[*1]. I highly value TOYO's significant contributions to mitigating global warming. However, while the carbon dioxide emissions from TOYO's own operations are relatively low, they are likely to rise as the business expands. Therefore, I see a need for continued efforts to manage our own carbon footprint.

*1: Industries where emissions reduction is particularly challenging.

Tatsuya Terazawa

Appointed in 2020

Q What is needed to further strengthen project risk management?

Labor shortages and supply chain constraints are pressing global issues. I inflation and higher interest rates are posing new challenges in addition to the risk of currency fluctuations in developing countries. In this changing environment, completing projects on time and within budget is becoming increasingly challenging. Rather than bearing these risks alone, TOYO should appropriately share risks with relevant stakeholders, ensuring returns that reflect those risks.

Connecting Diverse Talent and Group Companies: The Key to Creating New Value

Q What will be essential in promoting the Sustainable Technology and Business Development strategy?

It is vital for the Company to explore and reaffirm its core technologies and strengths, then focus on topics aligned with customer needs and contributions to solving pressing issues. To foster a corporate culture that approaches challenges with agility, it is essential to create intentional spaces within the organization where diverse talents from various backgrounds can actively contribute. Additionally, establishing management practices that support an environment of experimentation and learning through trial and error is crucial. I also believe that by sharing successful experiences through both internal and external networks, we can accelerate the Sustainable Technology and Business Development strategy.

Sayoko Miyairi

Appointed in 2020

Q What is needed to further advance inclusion and diversity?

An adaptive organization that unites individuals with varied experiences and perspectives can achieve both innovative advancements and effective risk management. By fostering interactions with the diverse experiences and global talent of our overseas group companies—and enhancing diversity at all levels, including management—the Company can sharpen its awareness of risks and opportunities, building this into a form of organizational insight. Now more than ever, it is essential to connect global teams and establish a foundation for generating new value.

Policies on the Determination of Amounts of Remuneration for Directors and Audit & Supervisory Board Members, and Methods of Calculation

Remuneration for TOYO's Directors (excluding Outside Directors) is set to be suitable, fair, and balanced and to increase Directors' motivation to maximize the Company's corporate value while ensuring medium- to long-term profit for shareholders. Remuneration consists of a fixed portion determined according to the positions of individual Directors, and a performance-linked portion. Performance-linked remuneration is calculated based on current net profit attributable to owners of the parent, which is considered the most suitable indicator of the Group's business performance. The remuneration amount is determined by the President & CEO according to the level of contribution of individual Directors. To set appropriate remuneration levels for Directors and Audit & Supervisory Board Members and to strengthen accountability, the ratios for both fixed and performance-linked remuneration, as well as the calculation formula for performance-linked remuneration, are determined by the Board of Directors based on the findings of the Nomination and Remuneration Advisory Committee consisting of the President & CEO and Outside Officers, following discussions on any revisions deemed necessary by the President & CEO. In light of the roles and independence of Outside Directors and Audit & Supervisory Board Members, remuneration for these officers is fixed and is not linked to business performance.

(FY2023)

Officer Classification	Total Remuneration (¥ million)	Total Remuneration by Type (¥ million)				Number of Eligible Officers
		Fixed Remuneration	Performance-Linked Remuneration	Retirement Benefits	Non-Monetary Remuneration, etc. Included at Left	
Directors (excluding Outside Directors)	170	170	—	—	—	6
Audit & Supervisory Board Members (excluding Outside Audit & Supervisory Board Members)	42	42	—	—	—	2
Outside Officers	36	36	—	—	—	7

Nomination and Remuneration Advisory Committee

TOYO has established the Nomination and Remuneration Advisory Committee as an advisory body to the President & CEO, with the goal of ensuring transparency in the decision-making processes for the nomination of Director and Executive Officer candidates, the appointment and dismissal of the Representative Director, the appointment and dismissal of executives, and the remuneration etc. of Directors and Executive Officers. The Nomination and Remuneration Advisory Committee meets once per year in principle, with additional meetings held as required.

The Nomination and Remuneration Advisory Committee consists of four members: the President & CEO, who serves as Committee chair, and three Independent Outside Directors.

	Nomination Advisory Committee	Remuneration Advisory Committee
Purpose	To serve as an advisory body to the President & CEO in the following regard and ensure transparency in decision-making processes.	
Agenda items	(1) Proposals for the appointment and dismissal of Directors for submission to the Shareholders Meeting (2) Appointment and dismissal of the Representative Director (3) Appointment and dismissal of executives (4) Matters concerning the development of successors to the President & CEO and other Directors and Executive Officers (5) Other nominations of Directors, Executive Officers, etc. (selection process for officer candidates, eligibility requirements for officers, evaluation criteria, etc.)	(1) The remuneration system for Directors and Executive Officers (2) Breakdown of compensation, including compensation amounts, for individual Directors and Executive Officers (3) Inquiries from the President & CEO regarding the remuneration system for Directors and Executive Officers: remuneration methods, calculation methods, remuneration tables, etc.
Committee structure	President and CEO Eiji Hosoi (Chairman) Outside Director Masami Tashiro Outside Director Tatsuya Terazawa Outside Director Sayoko Miyairi	
Times held in FY2023	2 times	2 times
Meeting topics	・Appointment and dismissal of the Representative Director ・Appointment and dismissal of executives ・Matters concerning the development of successors to the President & CEO and other Directors and Executive Officers ・Other nominations of Directors, Executive Officers, etc. (selection process for officer candidates, eligibility requirements for officers, evaluation criteria, etc.)	・Remuneration system for Directors and Executive Officers ・Breakdown of compensation, including compensation amounts, for individual Directors and Executive Officers ・Inquiries from the President & CEO regarding the remuneration system for Directors and Executive Officers: remuneration methods, calculation methods, remuneration tables, etc.

Compliance

Basic approach and policies concerning compliance

The Group's Basic Policy on Compliance requires that every member of our workforce not only comply with national and international laws, regulations, and rules, but also abide by the spirit of these rules in the execution of their day-to-day work. It further requires that employees improve the integrity and ethical values of the Company by acting in conformance with our Corporate Philosophy and by acting with a social conscience.

Commitment by the Top Management

Based on our recognition of the importance of top management's commitment to the maintenance and strengthening of compliance, our President & CEO annually issues a message that emphasizes the importance of compliance to Directors and to employees of all group companies.

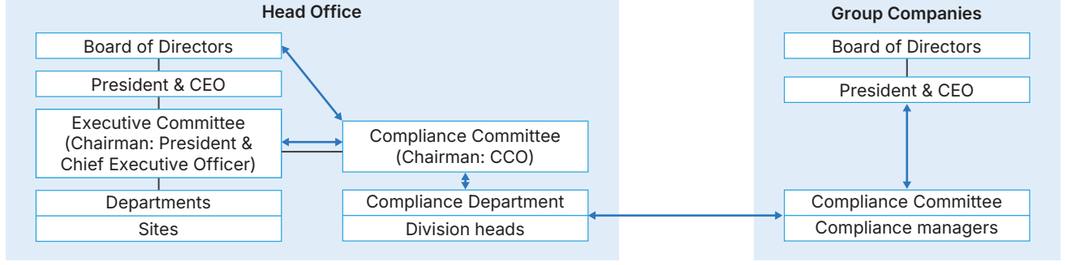
Codes and Manuals

Our Group has established TOYO's Code of Conduct, a Compliance Manual, and other related rules. We work to raise awareness of compliance among executives and employees and ensure compliance with laws and regulations. Once per year, we also have executives and employees submit written statements pledging to follow the above rules.

See our Code of Conduct here

Compliance System

We have established a Compliance Committee chaired by our Chief Compliance Officer (CCO), under which we endeavor to operate and monitor our compliance system and compliance-related educational and promotional activities. More specifically, (1) the Compliance Committee devises awareness raising and promotion activities, (2) the Compliance Department (which serves as the Secretariat of the committee) and division heads lead the way in implementing the above activities, (3) the committee confirms and evaluates implementation status, and (4) the CCO regularly reports the outcomes to the Board of Directors and the Executive Committee. The Board of Directors conducts a management review once per year. To ensure more unified Group-wide compliance activities, we have built a system under which Compliance Committees and managers are set up at group companies and regularly exchange opinions and share information with our Compliance Department.



Internal Whistleblowing System

As a system to ensure appropriate reporting to the Board of Directors and the Audit & Supervisory Board, we have developed an internal whistleblowing system concerning compliance, including the violation of laws and regulations. At all group companies, we establish internal and external points of contact for consultation and whistleblowing (including hotlines set up through third-party organizations, with anonymity offered to whistleblowers), and strictly prohibit any disadvantageous treatment of persons providing such information.

Number of serious violations of compliance	0 incidents
Number of cases of whistleblowing*1	17 incidents

*1 Non-consolidated and consolidated subsidiaries

Compliance training

As efforts to raise awareness of and promote compliance, we implement the following initiatives:
(1) Compliance-related group training, (2) new-employee training, (3) e-learning, (4) mini compliance tests, (5) compliance newsletter distribution, and (6) in-house lectures.

Compliance e-Learning Number of participants (new employees, first-time participants)*2	96
Total no. of mini compliance test participants*2	2,553

*2 Non-consolidated

Approach to Bribery Risks

The Group strictly prohibits bribery as well as the unlawful provision, offer, or promise of money or other benefit to foreign public officials, etc. We target all executives and employees with education and awareness-raising concerning the necessity of compliance with laws including the Unfair Competition Prevention Act, the US Foreign Corrupt Practices Act (FCPA), and the UK Bribery Act.

We continue to enhance and expand our program for preventing bribery of foreign public officials, and in particular, mandate applications and approvals prior to any provision of gifts, business entertainment, etc. as we work to prevent corruption.

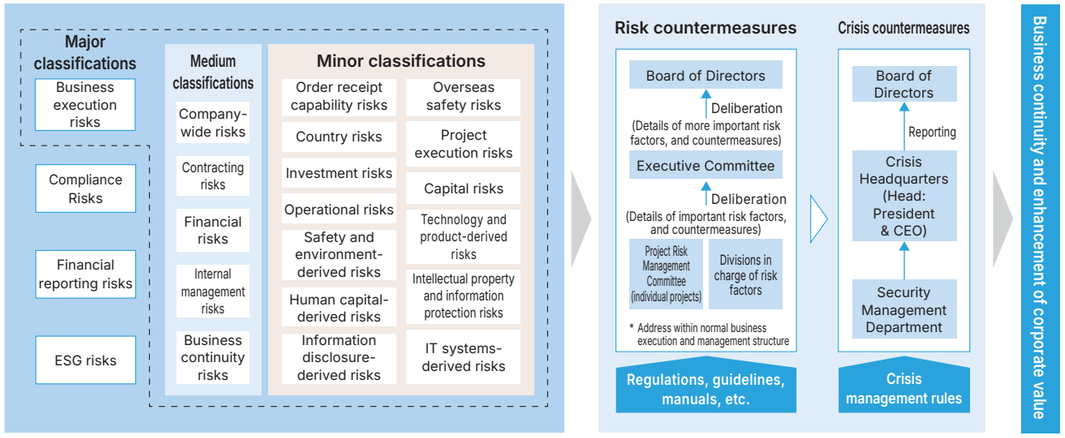
Risk Management

Basic Policy on Risk Management

Effective risk management in the form of risk assessment/evaluation and appropriate risk-taking is essential to the enhancement of corporate value. In our business overall, we identify events that may pose risks, including changes in the business environment, then clarify the processes of classifying, analyzing, evaluating, and responding to the risks, and clarify the relevant departments and related regulations. To assess and address potential risks as early as possible, we conduct periodic reviews, identify key risk factors, and carry out risk management. As an engineering company, we intend to continually build on our experience to enhance our risk management capabilities and appropriately deal with risks.

Risk Classification and Basic System

We classify risks to our Group's management from multiple angles in business execution, and evaluate the risks according to their possibility of occurrence and severity. At the same time, we evaluate a given risk from different perspectives such as compliance risk (fraud prevention and response), financial reporting risk (financial information disclosure), and ESG risk (non-financial information disclosure), achieving multi-faceted risk management.



Information Security Risk Management

We recognize that our Group has a vital responsibility to protect sensitive information including information in agreements with customers and business partners, information addressed by laws and regulations such as the Personal Information Protection Act, and key trade knowledge of our Group. We have established a Basic Policy on Information Security under which we address information security matters.

Basic Policies on HSE, Quality, and Information Security

Protection of Personal Information

Group Company Risk Management

We carry out risk management for group companies through the following series of actions.

(1) We set out group company management regulations, clarify authority and responsibilities, and, based on said regulations, require prior approvals or reporting between group companies and the Head Office with regard to prescribed matters.
(2) We also consider conformance with local legal systems, etc. by group companies, and maintain and operate a Group-wide compliance structure. In cooperation with relevant divisions, we carry out initiatives to ensure the reliability of financial reports and enforce compliance with security export controls.
(3) Group companies individually maintain systems for risk management and crisis management.
(4) The Group Management Division, in cooperation with the Internal Auditing Division, the Accounting and Finance Division, and Audit & Supervisory Board Members, requests regular reports from group companies on business execution status and financial status, and systematically conducts management and control.
(5) For equity method affiliates, in line with our level of equity and responsibilities, we construct appropriate management structures based on which the Group Management Division carries out management.

Project Risk Management

Pre-order (proposal selection and estimation) stage

For every project, we examine the technologies and work, assess and evaluate the risks involved, consider the potential impacts and probabilities of said risks, and draw up rational countermeasures. To facilitate these actions and to ensure transparency and check functions in their formulation processes, we have established and operate the system shown in the figure below.

Strengthening of Pre-Order Risk Management Projects involving large scale, importance, or novelty

Per-project discussion of initiative policy/strategy and analysis of risks at strategy policy meetings

↓

Determination by the Board of Directors of the advisability of starting proposal activities

↓

Proposal Activities and Cost Estimating

- Consideration of execution structure — Intra-Group formation, PM/key person/resource partner screening and formation
- Detailed examination of contract requirements — Requested delivery date; Schedule critical path

↓

Risk study and determination of countermeasure policy by the Project Risk Management Committee*

↓

Approval of risk countermeasure policies by the Board of Directors

↓

Assessment of suitability at cost appraisal meeting and schedule appraisal meeting

↓

Approval of price by the Unit Directors of Business Development and Marketing Unit & Project Operations Unit

↓

Approval and submission of final offer by the President & CEO, Executive Vice President, and CFO

Risk factors to consider
- Project novelty and specificity
- Contract terms
- Client credibility
- Partner credibility (financial strength), capabilities, experience, and resources
- Risk sharing with client or partner
- Resources within the TOYO Group (execution structure)
- Country risk (politics, economies, foreign exchange rates, taxation, security, infrastructure, etc.)
- Schedule

* Committees attached to the Executive Committee

Post-order (project execution) stage

We maintain and enhance project profitability by executing appropriate risk measures through approval of project execution policies that incorporate risk assessments and preconditions from the pre-order proposal stage to serve as risk countermeasures, and through regular reporting and monitoring during the execution period. For this purpose, we have constructed and operate the system shown in the figure below.

Strengthening of risk management after receipt of order

After receipt of order

Assured handover from proposal activities to projects

Immediately after start of the project

Planning and communication of a clear execution policy

During project execution

- Weekly/monthly management, reviews by division heads
- Enforcement of engineering and procurement with emphasis on construction work and operation
- Strengthening of construction management
- Implementation of Cold Eye Review by in-house experts
- Early detection and response to signs of problems
- Planning and implementation of early countermeasures in the event of problems
- Steering of course from high-level perspective
- Regular meetings for reporting to management
- Sharing of major risk and countermeasure information with other projects in progress

After project completion

Implementation of reliable feedback
- Analysis of job data via risk category classification, and provision of feedback
- In-house sharing of examples of project problems at job close-out report meetings

Risk factors to consider
- Weather, disasters
- Market conditions and economic conditions (rising capital and equipment costs/longer delivery time, rising labor costs, human resource shortages at every phase of EPC, rising transportation costs, shortage of transport vessels)
- Partner credibility (financial strength), capabilities, and resources
- Resources within the TOYO Group
- Increase in quantities of materials and equipment and of materials and equipment construction work
- Risk of construction delays and failure to meet performance guarantees
- Country risk (politics, economies, foreign exchange rates, taxation, security, infrastructure, unions, etc.)

Quality, and Health and Safety Initiatives

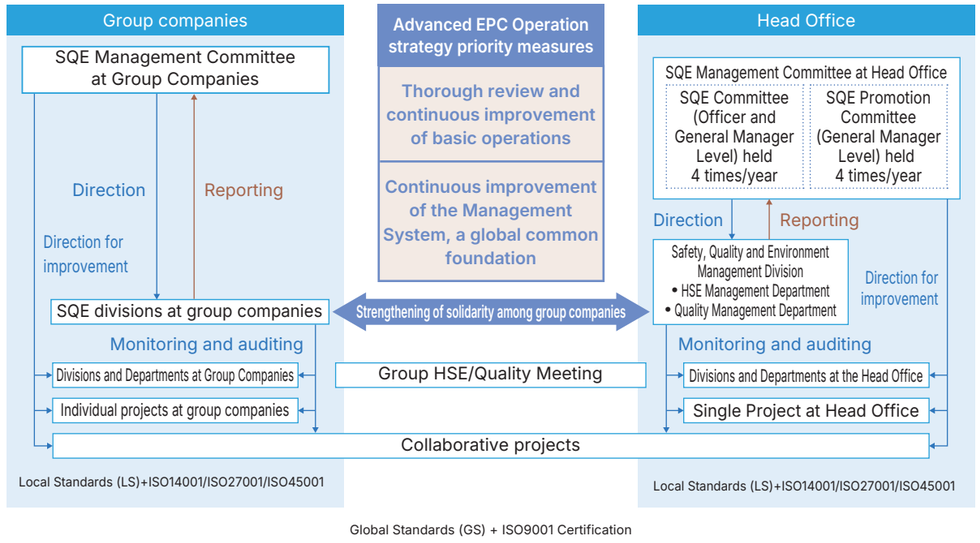
Basic Policies

TOYO recognizes that complying with HSE and quality-related laws and regulations, as well as satisfying the requirements of customers and society with regard to those, are essential preconditions for engaging in business activities and fulfilling our social responsibilities as a company. We have established basic policies for doing so, which we work to realize under the management structure outlined below.

See information on ISO certification here

See our Basic Policies on HSE, Quality, and Information Security page here

Safety, Quality, and Environment (SQE) Management Structure



ISO9001: Quality Management System; ISO14001: Environmental Management System; ISO27001: Information Security Management System; ISO45001: Occupational Health and Safety Management System

* Global Standards and Local Standards: Standards used in common across the TOYO Group were unified as Global Standards in 2008 so that all group companies would operate using the same management criteria. TOYO Group obtained ISO9001 group certification for its unified group operation in 2013 and has maintained certification since. By contrast, Local Standards are applied as work standards for individual group companies when executing domestic projects under the laws, regulations, etc. of the countries in which the companies are located.

* Group HSE/Quality Meeting (strengthening of solidarity among group companies): A meeting that brings the HSE/quality managers of group companies together to build consensus and promote improvements through active communication. Group companies also actively put forth proposals, which leads to the enhancement of management capabilities.

VOICE **Quality improvement initiatives**

Achieving knowledge sharing throughout TOYO and enhancing quality through FKMS

The Feedback Knowledge Management System (FKMS), a powerful tool for reducing the cost of quality-related losses, aims to enhance the value of TOYO through learning from and avoiding the repetition of failures and through repeating and further honing good practices. A system that is easy to use, FKMS naturally accumulates feedback on items spanning the occurrence of incidents to prevention of recurrence, in the form of knowledge that can be readily deployed throughout the TOYO Group. To entrench the new FKMS throughout the Group, we mandate educational courses for all employees, hold user meeting consisting of department representatives, and make use of users' comments to improve the system as it grows day by day.

Masanari Takahashi
Business Process Innovation Department
Digital Integration Division

Health and Safety

To ensure the occupational health and safety that are the foundation of business activities, over the years TOYO has faithfully undertaken efforts that include strengthening health and safety leadership by management, fostering a culture of health and safety, and adhering to health and safety standards. For example, as we strive for zero occupational accidents, we continue working to improve our safety activities, using lost time incident rate and total recordable incident rate as management indicators. As a result, TOYO maintains a lost time incident rate that is among the lowest in the industry. Safety record data covering the past 10 years, with overseas group companies included, is shown below.

TOYO's safety record over the last 10 years

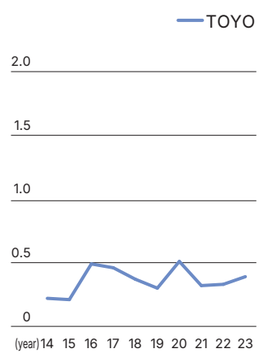
(ILO basis: Incidence rate per million hours worked)

Year	Man-hours	LTIR*1	TRIR*2
2014	89,777,237	0.08	0.22
2015	67,308,769	0.07	0.21
2016	52,540,748	0.06	0.49
2017	76,493,784	0.05	0.46
2018	102,817,669	0.11	0.37
2019	46,642,608	0.06	0.30
2020	44,895,756	0.07	0.51
2021	59,524,567	0.05	0.32
2022	82,244,375	0.07	0.33
2023	83,713,637	0.11	0.39

*1 Lost time incident rate (LTIR) = total lost time incidents x 1,000,000 / man-hours
*2 Total recordable incident rate (TRIR) = number of recordable incidents x 1,000,000 / man-hours

Lost time incident rate (LTIR)

Total recordable incident rate (TRIR)



Note: Source for construction industry average data: IOGP safety performance indicators - 2023 data

Initiatives for the prevention of disasters

To keep the slogans of "Safety above all" and "Safety is the foundation of corporate activities" from being mere rallying cries, TOYO engages in risk assessments involving overall construction work. Moreover, TOYO works to foster even greater awareness of safety and to demonstrate safety leadership across the Company, including group companies, to keep natural activities such as preparation of construction guidelines, pre-work confirmation of procedures at toolbox meetings, and risk prediction activities from becoming formalities. Occupational accidents decreased from 2023 to 2024. However, as the decline is coming to a halt domestically, we are strengthening the specific measures shown at right. Through these Company-wide measures, we will tackle accident prevention anew.

Core Topics TOPICS

- Continued implementation of Company-wide safety education, including engineering and office personnel, to enhance safety awareness and a safety culture throughout the Company
- Strengthening of professional education on safety laws and regulations, etc. for project and construction personnel
- Prevention of occupational accidents by restricting overtime work at construction sites and promoting physical and mental health

VOICE **Initiatives to prevent accidents**

Making safety a habit at work and in everyday living

Our company place the highest importance on a policy of "safety first, prevention foremost." Nurturing a safety-first mindset in employees is the starting point for building positive habits. We always emphasize that safety is critical not only to work but also to the livelihoods of employees themselves. Toward that end, all on-site staff undergo comprehensive safety education and training that allows the prevention of accidents.

Effective supervision is also vital, enabling quick response to dangers and the correction of safety violations. Over time, employees adapt to our safety management approach and acquire the habit of prioritizing safety in the workplace and in everyday living. This habit is the outcome that we seek.

Zhao Shun
General Manager, SQE Department
Toyo Engineering Corporation (China)

Relationship with stakeholders

With “Engineering for Sustainable Growth of the Global Community” as its mission, TOYO is tackling four materialities: “Aim to realize an environmentally friendly society,” “Enrich people’s lives,” “People of diverse backgrounds engage in active, meaningful work,” and “Establish an organization with integrity and discipline.” To achieve these, we believe that appropriate collaboration with diverse stakeholders including shareholders, employees, business partners, customers, and local communities is vital. Toward that end, in addition to establishing a multi-stakeholder policy, we will earn the trust of stakeholders and engage in sustainable corporate activities through dialogues and the activities noted below.

See information on our multi-stakeholder policy here

Stakeholders	Main dialogues and activities
Shareholders and investors	• Shareholders Meeting • Financial statements, **business strategy briefings** • Small meetings, individual interviews • Integrated Report • Overseas group company and construction site tours • Website
Employees	• Management policy briefings • New Year’s address by the President & CEO • Employee engagement surveys • Support for cultural and sports activities • Dialogue with labor unions • Family Day (workplace tours) • Communication of information via in-house intranet/email
Business partners	• Declaration of Partnership Construction • Consideration toward and collaboration with business partners based on our Basic Policy on Business Transactions
Customers	• Dialogue through sales activities • Participation in exhibitions • Provision of information on website • Introduction in product brochures • Introduction to company in PR publications
Communities	• Briefings for residents near construction sites • Sponsorship of local events • Official sponsor of Chiba Lotte Marines baseball team • Donation of medical equipment and office supplies • Education-related support (women’s toilet maintenance and construction of classrooms in India, etc.) • Acceptance of trainees from overseas • Skill enhancement support for local engineers • UNICEF foreign coin donation • Elementary school outreach classes • Dispatch of project management course instructors to educational institutions

TOPICS Business strategy briefings

We regularly hold briefing sessions for institutional investors, analysts, and the media to introduce our latest business strategies and focus areas. To date, we have conducted briefings on the following high-profile themes:

- SAF
  The potential of sustainable fuels that will change the future of the aviation industry, and our related initiatives
- Fuel ammonia
  The latest movements surrounding fuel ammonia, noted as a next-generation form of clean energy, and our related initiatives
- DXoT (Digital Transformation of Toyo)
  Strategies for and progress toward achievement of 6-fold productivity
- TOYO’s added value and approach to realizing a carbon-neutral society
  Development status of our fuel ammonia and hydrogen businesses and our waste plastic-to-oil business
- Synthetic fuels
  Explanation of methanol and other synthetic fuels synthetic fuel technologies and related business opportunities and initiatives
- Geothermal
  Explanation of geothermal power generation, including the latest technologies, and our related achievements and initiatives
- Plant energy saving and decarbonization solutions business
  Our innovative solutions for achieving energy saving and decarbonization

See information on business strategy briefings here

TOPICS The magic of the employee cafeteria, YOTEC!

Over a decade ago, TOYO and our labor union teamed up in an effort to improve the atmosphere of the Company. The result was YOTEC, a self-operated venue for communication set in an employee cafeteria. Temporarily suspended due to the COVID-19 pandemic, YOTEC is now held irregularly and has become popular as an enjoyable place for inter-departmental interaction.

Social contribution activities

India

We are making efforts to meet the social, economic, and environmental needs of disadvantaged people and those who have been left behind by society. From fiscal 2023 to fiscal 2024, we are actively conducting CSR projects in the fields of health care, education, hygiene, rural development, and enhancement of employment and livelihoods.

Education
With the aim of providing high-quality education to children in economically disadvantaged regions, we are providing funds for the reconstruction of dormitories, offices, digital classrooms, and math labs. We have also provided school furniture and educational scholarships to meet the educational needs of children in rural areas.

Math lab

Rebuilding of classrooms

Vocational skills enhancement and lifestyle enhancement project for persons with disabilities
As a component of our apparel manufacturing project, we provide funds to enable vocational training and employment for disabled persons who face poverty and unemployment.

Brazil

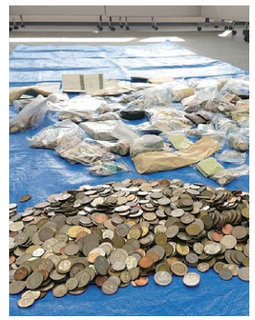
We recognize companies' importance to and impacts on surrounding communities, and view companies as integral to their regions and communities. We believe that it is our responsibility as a company to provide a workplace where all employees can work in good health and with peace of mind, and that employees will improve their work performance by understanding this.

Theater Workshop
We hold theater workshops where children and teenagers can learn about a wide range of performing arts. With the cooperation of local residents with experience in the performing arts, we conducted 13 presentations over the course of two years. For the children taking part in the workshops, we also set aside time for active dialogues and exchanges, talking about children's daily lives and social topics.

Warm-Up Project
In the winter of 2022, a number of employees began an initiative to donate clothing brought in from their families to socially vulnerable people. This has taken root as a participatory philanthropic activity by employees, with over 3,000 cold-weather clothing items delivered to date. The activity also spread to our headquarters in Brazil, which delivered clothing, blankets, and foodstuffs during the widespread floods that occurred in Rio Grande do Sul in May 2024.

Japan

Change for Good fund and collection of empty contact lens cases
Together with domestic affiliates, since 2019 we have participated in an eco project for the collection of empty contact lens cases, collecting a cumulative 160 kg of cases so far. By not burning the cases as waste, we contribute to the reduction of CO_2 emissions. The proceeds from recycling by means of re-productization are donated to activities for restoration of eyesight.
We also take part in the UNICEF Change for Good fund, spurred by employees who frequently go overseas on assignments or business travel and who asked how to best make use of foreign coins brought home. The donation box, now a well-known feature in the company, has taken in coins from a total of 45 countries so far. We donate the money to UNICEF every year.


UNICEF Change for Good fund

Collection of empty contact lens cases

CORPORATE DATA

Ten-Year Financial Highlights

Financial Highlights		FY2014 (fiscal year ended March 31, 2015)	FY2015 (fiscal year ended March 31, 2016)	FY2016 (fiscal year ended March 31, 2017)	FY2017 (fiscal year ended March 31, 2018*3)	FY2018 (fiscal year ended March 31, 2019)	FY2019 (fiscal year ended March 31, 2020)	FY2020 (fiscal year ended March 31, 2021)	FY2021 (fiscal year ended March 31, 2022*4)	FY2022 (fiscal year ended March 31, 2023)	**FY2023 (fiscal year ended March 31, 2024)**
Net sales	(¥ million)	311,454	299,813	431,917	335,697	294,993	219,094	184,000	202,986	192,908	**260,825**
Gross profit (loss)	(¥ million)	17,214	30,513	15,971	(12,521)	10,636	18,765	18,557	20,838	24,268	**28,391**
Gross profit margin	(%)	5.5	10.2	3.7	(3.7)	3.6	8.6	10.1	10.3	12.6	**10.9**
SG&A expenses	(¥ million)	24,570	19,426	17,980	20,429	16,250	16,875	16,941	17,875	19,504	**21,679**
Operating income (loss)	(¥ million)	(7,356)	11,087	(2,009)	(32,951)	(5,613)	1,890	1,615	2,963	4,764	**6,712**
Ordinary income (loss)	(¥ million)	(25,280)	3,873	1,603	(27,821)	3,426	2,467	2,781	3,126	3,888	**6,995**
Profit (loss) attributable to owners of parent	(¥ million)	(20,965)	3,038	1,472	(26,846)	(818)	1,664	814	1,620	1,647	**9,821**
Comprehensive income	(¥ million)	(25,534)	8,492	1,066	(25,758)	(3,818)	(376)	4,097	4,485	4,547	**15,055**
New orders	(¥ million)	470,369	443,537	116,790	309,325	298,052	187,054	122,895	274,467	211,038	**159,870**
New orders, including equity method affiliates	(¥ million)	unpublished	unpublished	unpublished	unpublished	unpublished	unpublished	unpublished	290,410	254,268	**462,336**
Backlog of contracts	(¥ million)	659,005	823,066	492,682	448,629	426,373	389,236	310,691	381,954	399,192	**299,675**
Backlog of contracts, including equity method affiliates	(¥ million)	unpublished	unpublished	unpublished	unpublished	unpublished	unpublished	unpublished	396,284	442,466	**550,408**
Total assets	(¥ million)	261,609	321,836	317,089	251,861	239,694	208,719	218,255	240,853	256,311	**285,996**
Net assets	(¥ million)	44,979	51,036	51,331	25,176	36,357	35,980	40,077	44,562	49,105	**64,153**
Interest bearing debt	(¥ million)	31,918	32,645	31,844	30,841	32,710	27,629	28,167	36,679	36,586	**36,278**
Net interest bearing debt	(¥ million)	(58,543)	(91,480)	(90,858)	(75,694)	(65,197)	(52,584)	(66,316)	(53,121)	(71,936)	**(72,793)**
Equity	(¥ million)	44,899	50,977	51,273	25,105	36,241	35,859	39,935	44,393	48,924	**63,937**
Equity ratio	(%)	17.2	15.8	16.2	10.0	15.1	17.2	18.3	18.4	19.1	**22.4**
Operating activities cash flows	(¥ million)	(4,192)	46,376	18,984	(22,824)	(25,828)	(18,696)	17,753	(6,790)	15,591	**6,001**
Investing activities cash flows	(¥ million)	9,587	(11,776)	(16,650)	6,386	1,354	7,980	(2,712)	(7,851)	(9,469)	**7,338**
Financing activities cash flows	(¥ million)	(14,341)	1,099	(1,548)	(1,174)	16,768	(6,159)	(451)	7,608	(1,574)	**(1,059)**
Dividends per share (annual)	(yen)	4.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	**12.0**
Earnings per share (EPS)*1	(yen)	(546.72)	79.24	38.42	(700.30)	(20.51)	28.40	13.91	27.65	28.11	**167.59**
Book value per share (BPS)*1*2	(yen)	1,170.99	1,329.60	1,337.40	654.91	554.11	544.16	650.52	766.81	885.04	**1,276.77**
Price-to-earnings ratio (PER)	(multiple)	-	18.5	36.3	-	-	11.4	56.2	23.0	20.1	**5.8**
Return on equity (ROE)	(%)	(35.9)	6.3	2.9	(70.3)	(2.7)	4.6	2.2	3.8	3.5	**17.4**

*1 The company conducted a one-for-five reverse stock split of common shares effective October 1, 2017. "Book value per share" and "Earnings per share (loss)" have been calculated on the assumption that this reverse stock split had been conducted at the beginning of the fiscal year ended March 31, 2015.
*2 Book value per share (BPS) from the fiscal year ended March 31, 2019 is calculated as residual assets attributable to class A preferred shares issued in March 2019, deducted from total net assets.

*3 The company applied "Partial Amendments to Accounting Standard for Tax Effect Accounting" (The Accounting Standards Board of Japan ("ASBJ") Statement No. 28, February 16, 2018), etc. from the beginning of the fiscal year ended March 31, 2019. Major management indicators, etc. for the fiscal year ended March 31, 2018 are based on retrospective application of the relevant accounting standards, etc.
*4 The company applied "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020), etc. from the beginning of the fiscal year ended March 31, 2022. Major management indicators, etc. for the fiscal year ended March 31, 2022 are based on application of the relevant accounting standards, etc.

See our Securities Report here

CORPORATE DATA

ESG Data

Environment

	FY2019 (fiscal year ended March 31, 2020)	FY2020 (fiscal year ended March 31, 2021)	FY2021 (fiscal year ended March 31, 2022)	FY2022 (fiscal year ended March 31, 2023)	**FY2023 (fiscal year ended March 31, 2024)**
Industrial waste recycling rate (domestic construction sites)	91%	90%	88%	94%	**83%**
Construction site industrial waste volume (domestic)	10,262t	9,992t	8,717t	17,697t	**11,270t**
Construction site industrial waste volume (overseas)*1	13,805t	37,963t	6,557t	10,318t	**33,091t**
Industrial waste volume (Domestic Head Office)	95t	58t	63t	70t	**73t**
No. of toxic material leaks (Domestic/overseas construction sites)	0	0	0	0	**0**
GHG emissions for TOYO Group overall (Scope 1, 2)*2	9,025t	9,430t	11,804t	13,656t	**15,015t**
(Scope 1)*2	1,224t	1,244t	3,226t	3,910t	**3,748t**
(Scope 2)*2	7,801t	8,186t	8,579t	9,746t	**11,267t**
Intensity (per employee) base (Scope 1 & 2)*2	1.64t/person	1.60t/person	1.87t/person	2.17t/person	**1.74t/person**
Electricity usage at domestic and overseas offices*1	10,438MWh	9,375MWh	9,757MWh	10,316MWh	**10,460MWh**
Electricity usage at domestic and overseas construction sites*1	2,852MWh	6,882MWh	8,649MWh	7,177MWh	**9,420MWh**
Renewable energy usage included in electricity usage at domestic and overseas construction sites*1	—	—	—	3,960MWh	**3,703MWh**
Water use (Domestic Head Office)	27.2 thousand m^3	18.5 thousand m^3	18.2 thousand m^3	21.7 thousand m^3	**23.6 thousand m^3**
Rainwater use (Domestic Head Office)	4.4 thousand m^3	3.1 thousand m^3	4.0 thousand m^3	3.9 thousand m^3	**2.8 thousand m^3**
Purchase volume of printing paper (wood-free paper) (Domestic Head Office)	28.8t	18.2t	16.9t	16.1t	**14.8t**

Governance

	FY2019 (fiscal year ended March 31, 2020)	FY2020 (fiscal year ended March 31, 2021)	FY2021 (fiscal year ended March 31, 2022)	FY2022 (fiscal year ended March 31, 2023)	**FY2023 (fiscal year ended March 31, 2024)**
Compliance Risk Management Reports					
Number of serious violations of compliance	0	0	0	0	**0**
Number of cases of whistleblowing*3	8	4	9	21	**17**
Number of compliance e-learning participants*4 (for new recruits and employees yet to complete the program)	33	66	69	76	**96**
Total number of compliance mini test participants*4	790	2,298	2,404	2,479	**2,553**
Information security promotion initiatives					
Serious information security incidents	0	0	0	0	**0**
Governance-related data					
Directors	5	5	5	5	**5**
Outside Director	4	4	4	4	**4**
Audit & Supervisory Board Member	2	2	2	2	**2**
Outside Audit & Supervisory Board Member	2	2	2	2	**2**
Average attendance ratio of Directors and Audit & Supervisory Board Members at meetings of the Board of Directors	96.7%	99.6%	98.8%	98.6%	**97.6%**

*1 Calendar year (January to December) *2 Group companies, including domestic and overseas construction site offices (calendar year) *3 Non-consolidated and consolidated subsidiaries *4 Non-consolidated *5 Excluding temporary employees *6 Main EPC companies, include equity method companies *7 Number of managers in positions equivalent to team manager or general manager *8 Lost time incident rate (LTIR) = total lost time incidents x 1,000,000 / man-hours *9 Total recordable incident rate (TRIR) = number of recordable incidents x 1,000,000 / man-hours *10 As of June 1 of each fiscal year; percentage of disabled persons hired includes special-purpose subsidiaries *11 Excluding employees on long-term assignments overseas, employees on temporary assignment, mid-year recruits, employees on long-term sick leave, and employees on extended leave

See our Securities Report here

Social

		FY2019 (fiscal year ended March 31, 2020)	FY2020 (fiscal year ended March 31, 2021)	FY2021 (fiscal year ended March 31, 2022)	FY2022 (fiscal year ended March 31, 2023)	**FY2023 (fiscal year ended March 31, 2024)**
Consolidated	Number of employees*5 *6	4,204	4,425	4,625	5,730	**6,207**
	Male	3,566	3,749	3,888	4,752	**5,140**
	Female (%)	638 (15%)	676 (15%)	737 (16%)	978 (17%)	**1,067 (17%)**
	No. of engineers*6	2,815	2,824	3,087	3,265	**3,577**
	Male	2,529	2,537	2,745	2,873	**3,153**
	Female (%)	286 (10%)	287 (10%)	342 (11%)	392 (12%)	**424 (12%)**
	No. of managers*6 *7	1,119	1,112	1,150	1,163	**1,106**
	Male	1,065	1,055	1,090	1,099	**1,038**
	Female (%)	54 (5%)	57 (6%)	60 (5%)	64 (6%)	**68 (6%)**
	Man-hours*1	49,642,608 hours	44,895,756 hours	59,524,567 hours	82,244,375 hours	**83,713,637 hours**
	Fatalities*1	0	0	0	1	**1**
	Lost time incidents*1	3	3	3	5	**8**
	LTIR*1*8	0.06	0.07	0.05	0.07	**0.11**
	Medical treatment*1 (No-lost-time incidents)	11	20	16	21	**24**
	TRIR*1*9	0.30	0.51	0.32	0.33	**0.39**
Non-consolidated	Number of employees*5	998	968	989	974	**968**
	Male	817	790	809	800	**780**
	Female (%)	181 (18%)	178 (18%)	180 (18%)	174 (18%)	**188 (19%)**
	No. of engineers	757	738	754	744	**716**
	Male	709	687	703	694	**667**
	Female (%)	48 (6%)	51 (7%)	51 (7%)	50 (7%)	**49 (7%)**
	No. of managers*7	583	569	573	564	**522**
	Male	561	543	548	536	**494**
	Female (%)	22 (4%)	26 (5%)	25 (4%)	28 (5%)	**28 (5%)**
	No. of foreigners in managerial roles (%)	—	—	28 (5%)	35 (6%)	**35 (8%)**
	No. of mid-career hires in managerial roles (%)	—	—	126 (22%)	138 (25%)	**135 (26%)**
	No. of foreign employees	48	50	60	61	**60**
	No. of disabled persons hired (%)*10	21 (1.8%)	21 (2.1%)	24 (2.5%)	28 (2.8%)	**26 (2.4%)**
	No. of male employees taking childcare leave	4	5	10	14	**13**
	Percentage of male employees taking childcare leave	—	—	31.3%	43.8%	**37.1%**
	Average length of paternity leave	—	—	58.2 days	61.4 days	**163.9 days**
	No. of female employees taking childcare leave	3	7	12	5	**7**
	No. of persons taking paternity leave	21	25	28	25	**27**
	No. of persons working shorter hours for childcare reasons	14	15	12	10	**12**
	No. of persons working shorter hours for nursing care reasons	1	1	1	0	**2**
	No. of persons taking family care leave	96	81	101	144	**170**
	No. of persons taking nursing care leave	0	0	1	1	**1**
	Percentage of annual leave used*11	61.9%	57.6%	54.7%	61.2%	**61.3%**
	Wage gap between men and women	—	—	69.3%	71.1%	**71.6%**

CORPORATE DATA

Corporate Information (As of March 31, 2024)

Corporate Data

Corporate Name	Toyo Engineering Corporation
Founded	May 1, 1961
Capital Stock	¥18,198 million
Number of employees	7,283 (including consolidated and equity-method companies; current as of March 31, 2024)
Business Activities	Engineering and Construction for Industrial Facilities R&D support, design, engineering, procurement, construction, commissioning, technical assistance for industrial facilities Business fields: Oil, gas, oil & gas development, petrochemicals, chemicals, water treatment, transportation systems, power plants, nuclear power, advanced production systems, pharmaceuticals, fine chemicals, logistic centers, biotechnology, environmental conservation, others

See information on group companies here

Affiliate Information

Domestic Affiliates

Tec Air Service Corp.
TEC Business Services Corp.
TEC Project Services Corporation
Chiba Data Center Co., Ltd.
Tec Accounting & Consulting LTD.

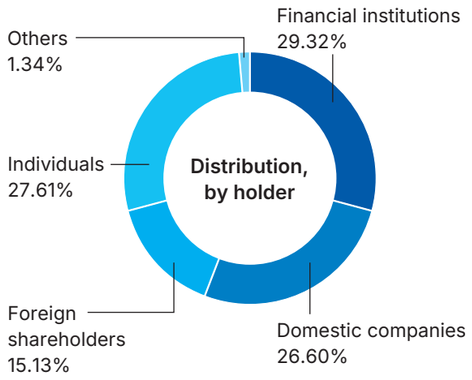
Overseas Affiliates

South Korea	Toyo Engineering Korea Limited
China	Toyo Engineering Corporation (China)
Indonesia	PT. Inti Karya Persada Tehnik
Malaysia	Toyo Engineering & Construction Sdn. Bhd.
India	Toyo Engineering India Private Limited
Singapore	Offshore Frontier Solutions Pte. Ltd.
Europe	Toyo Engineering Europe, S.r.l
U.S.A.	Toyo U.S.A., Inc.
Brazil	TS Participações e Investimentos S.A.

Stock Information

Stock Exchange Listing	Tokyo Stock Exchange
Authorized Shares	Common shares 100,000,000 Class A preferred shares 25,000,000
Capital Stock Issued	Common shares 38,558,507 Class A preferred shares 20,270,300
Number of Shareholders	Common shares 14,797 Class A preferred shares 2
Securities code	6330

Types of Shareholder (Common Shares)



List of Major Shareholders

(1) Common shares

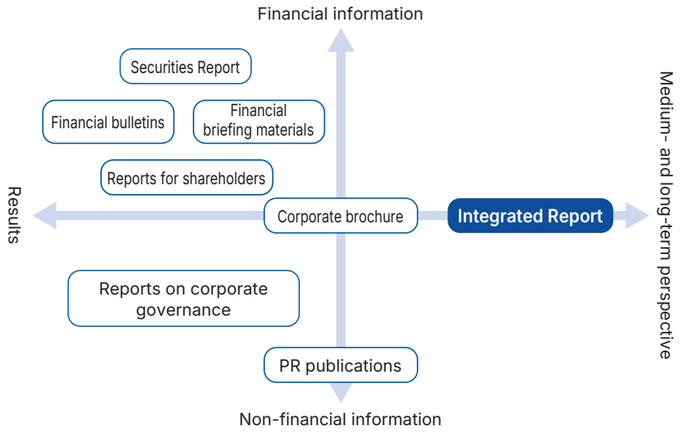
Stakeholder	No. held (thousand shares)	Percentage of voting rights held	Shareholding ratio (%)
Mitsui & Co., Ltd.	8,754	22.90	14.94
Custody Bank of Japan, Ltd. (Sumitomo Mitsui Trust Bank, Limited. Re-trust Account, Mitsui Chemicals, Inc. Pension Trust Account)	5,140	13.45	8.77
The Master Trust Bank of Japan, Ltd. (Trust Account)	3,434	8.98	5.86
TAISEI Corporation	1,000	2.62	1.71
Custody Bank of Japan, Ltd. (Trust Account)	663	1.74	1.13
Sumitomo Mitsui Banking Corporation	470	1.23	0.80
THE BANK OF NEW YORK MELLON 140040	376	0.98	0.64
JPMorgan Securities Japan Co., Ltd.	369	0.97	0.63

(2) Class A preferred shares

Stakeholder	No. held (thousand shares)	Percentage of voting rights held	Shareholding ratio (%)
Integral Team Limited Partnership	17,576	—	29.99
Innovation Alpha Team L.P.	2,693	—	4.60

Note 1: Shareholding ratio is calculated after the deduction of 228,981 treasury shares.
2: Class A preferred shares do not hold voting rights.

System diagram of related materials



Website

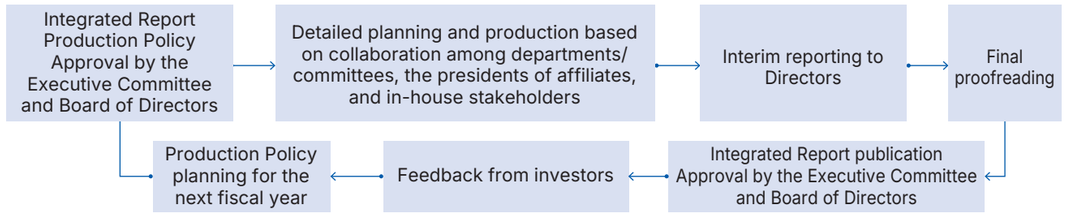
See detailed information here.

Related materials

Integrated Report | Corporate brochure | PR publication TOYO TIMES

See details of related materials here.

Production Flow



Editorial Postscript

Thank you for reading Integrated Report 2024.
We have prepared this Integrated Report to let as many people as possible understand how TOYO's contributions to solving social issues make it a company that is vital to society and a company that can continuously grow its corporate value. It is our hope that this report will aid in building richer dialogues with stakeholders. We will strive to connect new insights gained through these dialogues to our efforts to further enhance our corporate value. We would like to take this opportunity to express our gratitude to the analysts, institutional investors, employees, and production companies who cooperated in the production of the report.

Corporate Communications Department,
Integrated Report Production Team

TOYO ENGINEERING

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