



# YASKAWA

YASKAWA Report 2023



## Introduction

Since its establishment in 1915, Yaskawa Electric has constantly strived to take on the latest technologies of the times, upholding its corporate motto of being “a company founded on technology” and defining its business domain as “electric motors and their applications.”

Currently, the business environment surrounding the Yaskawa Group is rapidly changing due to the global shortage of components, mainly semiconductors, exchange rate fluctuations and geopolitical risks. Amid this environment, while always keeping Yaskawa Principles at its core, the Yaskawa Group aims to become a company that continues to be needed by society by contributing to a sustainable society through the core technologies it has cultivated and the implementation of “i<sup>3</sup>-Mechatronics.”

To achieve this goal, the Yaskawa Group launched its mid-term business plan, “Realize 25” in FY2023. In this report, we introduce our approach to realize our long-term management plan, “Vision 2025 (FY 2016 to FY 2025),” which has the same target year as “Realize 25” and our initiatives for further growth beyond 2025.

## Our Unique Foundation

Kitakyushu, where Yaskawa Electric was founded and where the head office is still located, has been one of the leading coal production areas in Japan. With the commencement of operations of the government owned Yawata Steel Works (Kyushu Steel Works, Nippon Steel Corporation) in 1901, various industries have been born, and the city has successfully developed as a “manufacturing town” that supported Japan.

The Yaskawa Group will further improve the Yaskawa brand and realize sustainable growth as a global company by taking full advantage of Kitakyushu's unique strengths, such as its strong presence in Kitakyushu, its accessibility to Asian markets, mainly China, and its potential as an environmentally advanced city.



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### Editorial Policy

YASKAWA Report 2023 is intended to serve as a platform for high quality dialogue with stakeholders. We strive to provide comprehensive financial and non-financial reports on the Yaskawa Group's strategies and results. In addition, by referring to and utilizing the IFRS Foundation's “Integrated Reporting Framework” and the Ministry of Economy, Trade and Industry's “Guidance for Collaborative Value Creation,” we aim to be able to help deepen readers' understanding of the medium- to long-term value creation that Yaskawa group is aiming for.



### Scope of Reporting, etc.

**Period covered:**  
March 1, 2022 to February 28, 2023 (Certain contents include activities occurred in or after March 2023.)

**Scope:**  
YASKAWA Electric Corporation and consolidated subsidiaries  
Note: A part of non-financial information is provided of YASKAWA Electric Corporation.

**Accounting standard:**  
Unless otherwise stated, figures for FY2017 and earlier are stated in accordance with Japanese GAAP, and figures for FY2018 and after are stated in accordance with International Financial Reporting Standards (IFRS).

### Cautionary Statement Regarding Forward-Looking Statements

Future projections for performance and other matters contained in this report are based on the information that is available at the time of issue and on a certain level of requirements as seen rational, however, actual results may vary due to various factors. Some examples of such factors are economic conditions, both in Japan and outside the country, trends in demand for the company's products and services, and trends in foreign exchange and stock markets. Please also note that factors which may impact the company's results are not limited to the aforementioned.

Based on the “founding motivation” of its founder, Daigoro Yasukawa, the Company formulated its corporate motto in 1979, due to a sense of danger in management during the confusion of the first oil shock in the 1970s. We have reclassified it into “Our Purpose,” “Our Values” and “Our Actions” in 2022 as the Yaskawa Principles to promote better understanding and strengthen the practices of all employees globally.

This principle always serves as a flag for the significance of our existence, the core values of “Quality,” “Profitability” and “Market,” as well as the daily code of conduct. The spirit behind this is our origin, which never changes over time. We take this origin as the foundation of our mind for the sustainable growth of the Yaskawa Group into the future, and put it into practice every day as the criteria of judgment, to realizing our principles.

# Our Principles

## Column

### Founding spirit living in the corporate motto



Daigoro Yasukawa

When YASKAWA Electric Manufacturing Co., Ltd. (the predecessor of YASKAWA Electric Corporation) was founded, its founder, Daigoro Yasukawa, drew up the “Founding Spirit,” and in the following year, established “Business Policy” and a “memorandum” consisting of 13 points. The business policy was to “not forget the ideal for the sake of temporary profit, and give first priority to the satisfaction of customers with sincerity.” and the memorandum stated, “we will strive to design and manufacture products that are unique to our company,” “We will always focus on quality,” and “We will expand our sales channels with the best quality of our products.” Regarding the memorandum, he said, “It was a very youthful and impractical argument. I feel ashamed comparing it with my later achievements.” However, the Yaskawa Group’s unique characteristics and strengths have been consistent in that it has developed a great deal of technology, introduced innovative products to the world, and served customers with sincerity as a good partner.



Writings and biographies of Daigoro



## Our Purpose

Yaskawa’s mission is to contribute broadly to social development and human welfare through the execution of our business.

Since its inception, YASKAWA Electric has expanded its business with “electric motors and their applications” as a major business pillar. The spread of our Group’s diverse technologies and products to society will help to improve the advancement of machinery and manufacturing.

Yaskawa innovation contributes to the advancement of social development, creating a safer, cleaner, more efficient and sustainable workplace to free the workforce from the 3Ds (Dangerous, Dirty, Dull). The purpose of the Yaskawa is to contribute to a society where people can live a safe, secure and humane life.

## Our Values

To achieve the mission, our group has set the following three objectives and work hard to achieve them.

### 1. Quality

Always developing and improving world-class technologies with a focus on quality

### 2. Profitability

Working to improve management efficiency and secure Profit necessary for the sustainable growth

### 3. Market

Serving the needs of our customers and pursuing customer satisfaction

## Our Actions

We respect our group’s heritage and strive to realize our mission, and through this, we seek the group’s prosperity and our own well-being by raising society’s trust. In particular, the following five items comprise our daily action guidelines.

- ✓ Stay customer-focused.
- ✓ Pursue both high quality and high profitability.
- ✓ Work hard to overcome the competition with a fighting spirit.
- ✓ Broaden our perspective and change our thinking.
- ✓ Deepen mutual trust and strive for unity and cooperation.



# Our Corporate Culture

Since its establishment in 1915, Yaskawa Electric has earnestly pursued for more than 100 years the business area of “motors and their applications” and “making things happen by driving motors.” This is the core of the company that will never change. This page introduces the 6 DNAs (corporate culture) that has been nurtured over the past 100 years since the foundation of the company, as people from each era gathered their wisdom and overcame many difficulties.

## DNA 1 Technology-driven



Electric motors were starting to advance into all industrial segments as replacements for steam engine at the beginning of the Taisho period. Daigoro Yasukawa was among those who learned the fundamentals of such leading-edge technology. In 1915, with his father promising “to provide financial support, but not interfere with the way the business is run,” Daigoro founded our predecessor, Yaskawa Electric Manufacturing Co. The company started its business by manufacturing electric motors for mining, where the imported products dominated and domestically produced motors were scarce.

Daigoro expressed his wish to contribute to the nation by exporting domestically produced motors in his “motivation of establishment,” and aimed at undertaking the business with the company’s own technologies, not by copying the leading Western products. At the age of 29, Daigoro expressed his passion, and in fact promoted the development of a wide variety of products, including switches and transformers, in addition to various motors. At this time, a culture of “technology-driven” was established, which is the basis of Yaskawa.



Founder  
Daigoro Yasukawa

## DNA 2 Customer and application focus

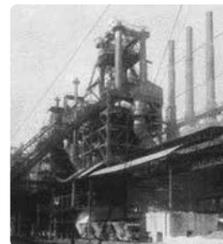


The founder, Daigoro Yasukawa, created the “Business Policy” the year after he founded Yaskawa Electric Manufacturing. He set forth his policy of not forgetting the ideal for the sake of temporary profit, and giving the first priority to the satisfaction of customers with sincerity. As motors began to be used by customers through the business, the ideal form and direction of the entire organization have been created based on the concept of “learning how the motors are used by customers (applications) and providing optimal systems.”

## DNA 3 Quality first



After the World War II, energy shifted from coal to oil, and the heavy chemical industry developed. At that time, the company was engaged in manufacturing equipment (process automation) for materials such as steel making and spinning, which operated 24 hours a day. The idea of “quality first” became ingrained in the organization as we believed that we should not cause any trouble to our customers’ equipment.



After World War II, we demonstrated our exclusive strength mainly in automatic charging equipment for raw materials around blast furnaces.

## DNA 4 Mechatronics



In 1969, Yaskawa became the first company in the world to propose the concept of “mechatronics,” aiming to “Integrate customer machines with Yaskawa motors and controllers to achieve higher functionality.” We accelerated our business expansion from conventional process automation to factory automation, aggressively invested resources in response to the rapid growth of the mechatronics market, and introduced a number of new products. Against this backdrop, “MOTOMAN-L10,” Japan’s first all-electric arc welding robot, was born, laying the foundation for the company’s Robotics Business.



**Minertia motor (1958)**  
A motor that became the basis for the servo motor available today. A revolutionary product that had a response rate 100 times greater than conventional motors.



Moto-arm (left) and moto-finger (right) commercialized in the late 1960s.



**MOTOMAN-L10 (1977)**  
Japan’s first all-electric vertical articulated industrial robot

## DNA 5 Policy-based management



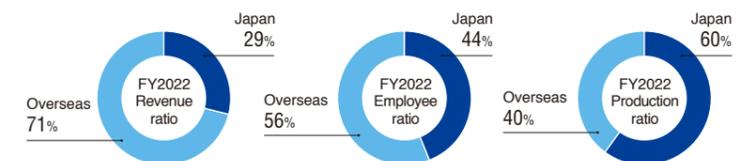
At the time “mechatronics” was launched, the existing business was still mainly focused and the concept was not a culture yet but just a vision. As such, Yaskawa worked on TQC (policy management) as a tool to set the whole organization in one direction. Yaskawa established its own management system, including tools for setting and managing targets in development, manufacturing and sales. As a result, the vision of mechatronics and TQC have become part of its corporate culture, and Yaskawa has made significant progress in the R&D and customer development for automation in the assembly industry.

## DNA 6 Global



After the end of the Japanese bubble economy in the 1990s, Yaskawa began localizing its business to expand its overseas business base. Yaskawa didn’t sell the Japanese products as they were to overseas markets but provided customer services and products needed in each region. It was a different way from that of many Japanese companies at that time but the culture matched well with the changes of business environment. Today, in addition to products and sales organization tailored to the characteristics of each region, we are implementing global management that combines efficient global operations with management tailored to the characteristics of each region.

### FY2022 overseas ratio (Revenue/employee/production)



The six DNAs (corporate culture) that have been cultivated over a history of more than 100 years have been strengthened through the succession of practices of Yaskawa principles, and they form the current strengths of the Yaskawa Group.

**The six DNAs**  
 as corporate culture

DNA 1  
**Technology-driven**

DNA 2  
**Customer and application focus**

DNA 3  
**Quality first**

DNA 4  
**Mechatronics**

DNA 5  
**Policy-based management**

DNA 6  
**Global**



**World's first**  
 Transistor AC drive  
 VS-616T (1974)

**World's first**  
 Multiple robot cooperative control  
 MOTOMAN-SK Series (1995)



**World's first**  
 Matrix converter  
 Varispeed AC (2005)



**World's first**  
 GaN power semiconductor equipped  
 Servo motor with built-in amplifier (2017)

**Development** focused on  
 the world's first and best technologies

Since its establishment, the company has focused on "electric motors and their applications" and has produced many of the world's first and world's best technologies and products. Yaskawa's technologies and products lead to industrial innovation and contribute to the development of society.

**Customers' trust**

Since the 1930s, when we established a policy of not only manufacturing and selling motors, but also learning how they are used by customers and providing optimal systems, we have maintained a stance of being close to our customers. Even today, based on our policy of continuing to provide high value-added and high-quality products that realize the benefits of improvement and evolution that customers demand, we promote our business with a strong relationship with our customers.



Production line in Yaskawa Solution Factory

**Ability to transform**

In 1969, Yaskawa pioneered the concept of "mechatronics," and the following year, in 1970, it envisioned "Unmanned Factory," an automated factory that humans and machines work together by using mechatronics. In the 1970s, when Japanese manufacturing shifted from the material industry to the assembly industry, the concept of "mechatronics" from the Yaskawa Group became the driving force behind the Third Industrial Revolution. Then, in 2018, the Yaskawa Solution Factory was established, which embodied unmanned factory envisioned for a long time. As a demonstration factory for i<sup>3</sup>-Mechatronics, it is leading the transformation of manufacturing and business. Based on the concept of i<sup>3</sup>-Mechatronics, the Yaskawa Group will lead the evolution of production in the Fourth Industrial Revolution, which aims to achieve optimal production systems in a data-driven society.

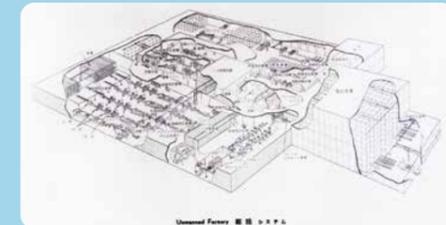


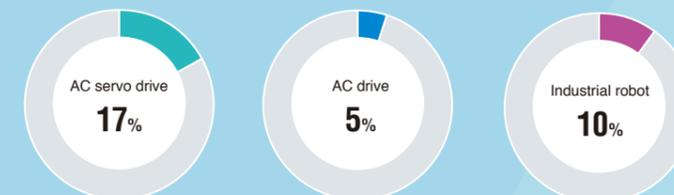
Diagram of "Unmanned Factory"

# Our Unique Strengths

**Strong presence**  
 in global markets

We have been involved in the export of products since the early days of our founding, following the spirit of our founder, who had a wish to contribute to the nation by exporting domestically produced motors overseas. Since the 1990s, we have been localizing our business and building our own sales network and production system in demand areas, and we have a top-level global market share in our core products.

Market share (company estimate)



# i<sup>3</sup>-Mechatronics

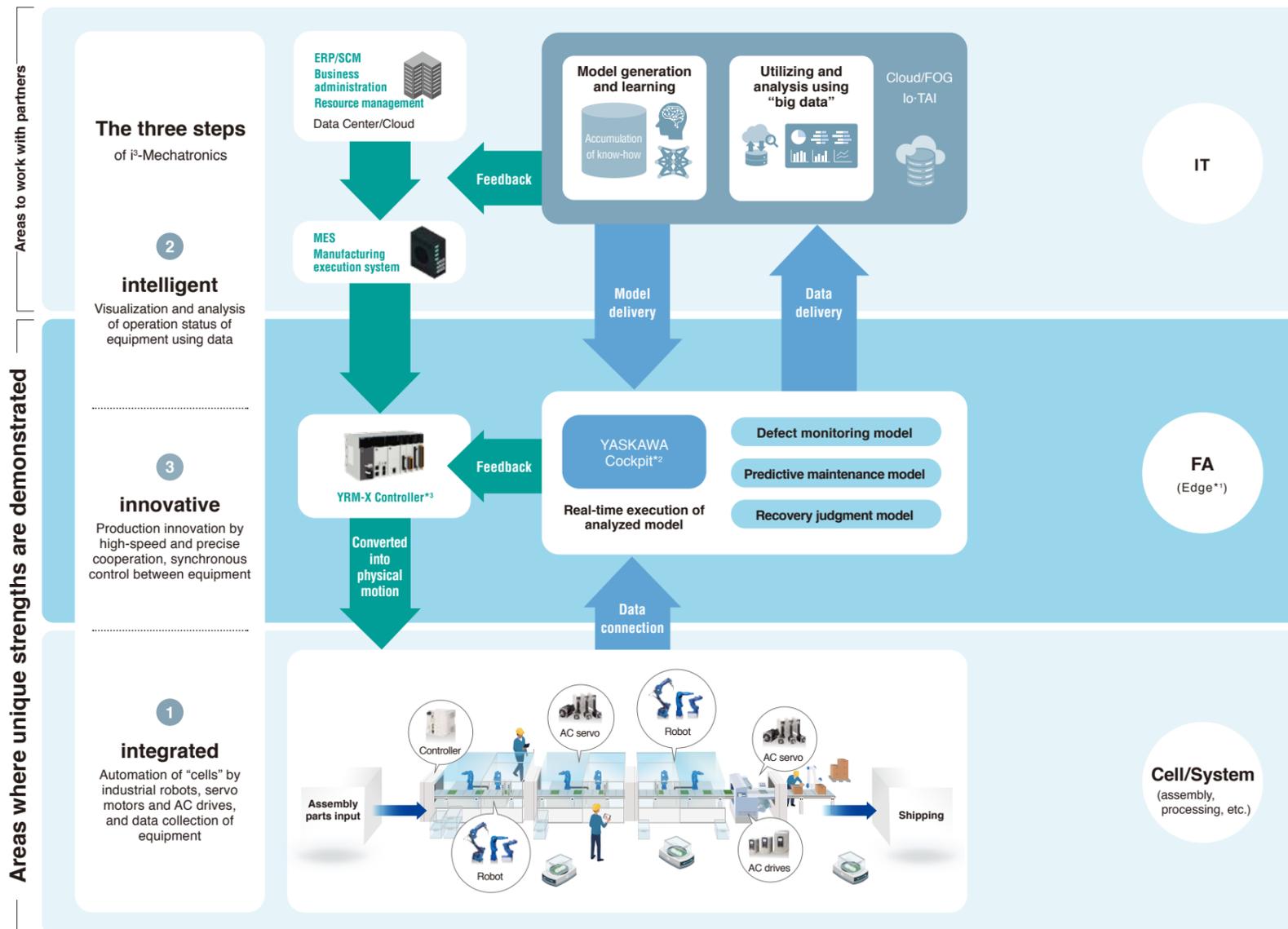
Our company's strength has been to automate the "cells," a unit of the factory's production line, with industrial robots, servo motors and AC drives.

In 2017, Yaskawa announced the "i<sup>3</sup>-Mechatronics" solution concept, proposing to automate the cell and manage it with digital data as a solution to the "improvement and evolution" demanded by customers. This enables us to manage the operation status of equipment with process data and the production status with status data as "numerical values" rather than "expert knowledge."

The i<sup>3</sup>-Mechatronics will proceed in three "i" steps: **1** integrated, **2** intelligent, and **3** innovative. This will help resolve various manufacturing issues from the perspective of production, quality, and maintenance in order to realize the smart factories that our customers aspire to. (See the figure below)

Yaskawa has a global brand in industrial robots, servo motors, and AC drives, which are essential "products" for factory automation, and we seek to differentiate ourselves and create added value by proposing solutions unique to our company, which has accumulated the practice of "i<sup>3</sup>-Mechatronics" in its own production.

The Smart Factory where i<sup>3</sup>-Mechatronics Is Realized



Solution examples to the "improvement and evolution" demanded by customers by i<sup>3</sup>-Mechatronics

	Production	Quality	Maintenance
Improvement of the direct connection rate	Reduced tact time Shorter installation time	Flexible production	
Homogenization	Accuracy improvement	Quality inspection	
Failure prediction	Recovery support	Ease of replacement	

\*1 Area of information processing for real-time data analysis and feedback (Areas close to production floor, such as factories and production sites)  
 \*2 Software that can collect, store, and analyze data on production facilities and equipment in real time  
 \*3 Controller for integrated control of "cell" composed of devices and industrial robots by synchronizing various data from cell at high speed, in real time and in time series

The Yaskawa Group is committed to value creation through its unique business model, leveraging the unique strengths it has accumulated over the years. We will contribute to a sustainable society by further enhancing our business value through our materiality initiatives.

**Realization of Yaskawa Principles**  
 "Contribute broadly to social development and human welfare through the execution of our business"

**Contribute to a sustainable society through i<sup>3</sup>-Mechatronics**

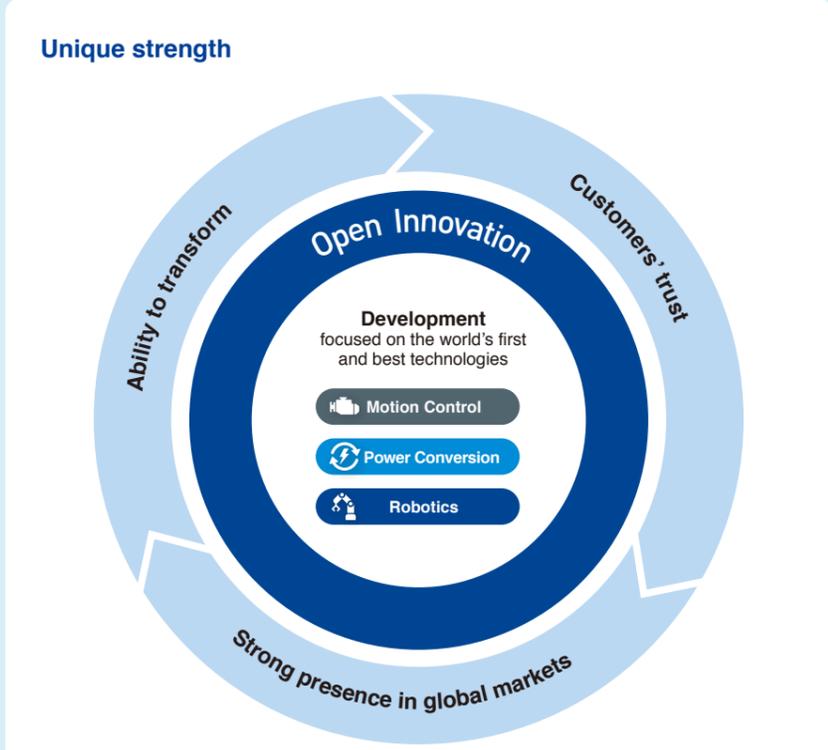
**Goals**

**Respect Life**  
 We aim to contribute to improving quality of life and building a sustainable society with technologies accumulated over the past century.

**Empower Innovation**  
 We venture in new technologies/ domains/targets to bring excitement and enthusiasm to people.

**Deliver Results**  
 We promise to deliver assured results to stakeholders, while continuously enhancing business execution capabilities.

**Input**



**Management capital**

**Financial capital**

We will use the cash generated by our business activities in three directions: investment for growth, shareholder return, and employee allocation to achieve sustainable earnings growth and increase corporate value.

**Manufactured capital**

We constantly strive to improve the efficiency of our production systems, while at the same time ensuring sufficient production capacity to meet market needs.

**Intellectual capital**

We will continue to develop the world's first and best technologies, collaborate with joint development partners, and exercise our global intellectual property strategies to create customer value.

**Human capital**

In order to respond swiftly to rapidly changing business environment and to achieve corporate evolution and strengthen competitiveness, we aim to be a company that is rewarding to work for where diverse employees make the most of their abilities.

**Social and relationship capital**

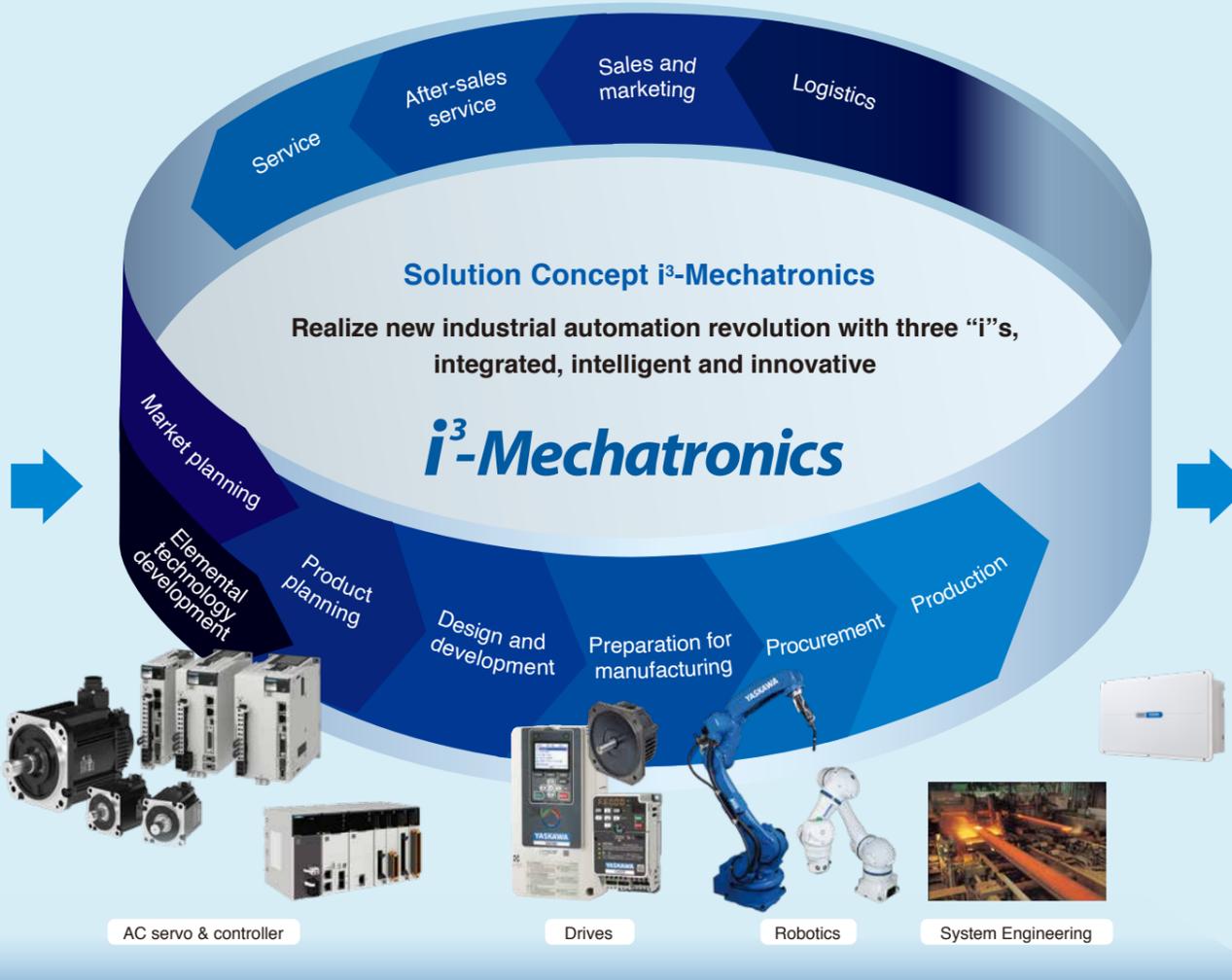
We carry out our business based on trust with various stakeholders and strive to build relationships that lead to continuous mutual development.

**Natural capital**

We create value by reducing the environmental impact of our products (green products) and by reducing the environmental impact of Yaskawa Group's business activities (green process).

**Sustainable growth**

**Value chain**



**Output**

**Creation of economic value**  
 Operating profit / ROE / ROIC / Dividend payout ratio

**Materiality**

- Create social value and solve social issues through business activities**
  - Realize revolutionary industrial automation with partners through "i<sup>3</sup>-Mechatronics"
- Build clean social infrastructure and foundation for safe and comfortable living**
- Develop new technologies and business domains through open innovations**
  - Dual-armed robot for biomedical application
- Strengthen management foundation that contributes to sustainable society/businesses**
  - Sustainable and productive manufacturing
  - Create a rewarding workplace and human resource development
  - Fair and transparent governance system

**Transformation of development, production, sales, and services using the digital management infrastructure of YDX (YASKAWA Digital Transformation)**

Yaskawa's Inherited DNA (Corporate culture)

Technology-driven

Customer and application focus

Quality first

Mechatronics

Policy-based management

Global

01 Drivers of Value Creation  
 02 Management Policy  
 03 Creating Social Value and Solving Social Issues through Business  
 04 Foundation of Value Creation  
 05 Corporate Governance  
 06 Corporate Data



**Work together as one globally centering on Yaskawa principles and practice “i<sup>3</sup>-Mechatronics,” a solution concept to become the company that supports a wider range of industries and society than ever before**

I'm Masahiro Ogawa. I became the Representative Director, President in March 2023. Since joining Yaskawa Electric in 1987, I had consistently gained experience in the Robotics division. In 2010, I moved to the U.S. and oversaw all our business segments, while gaining experience of global business management. After coming back to Japan in 2016, I worked hard to realize the “i<sup>3</sup>-Mechatronics” advocated by Mr. Ogasawara, Chairman of the Board. From now on, as the President, I will lead the Yaskawa Group to let us work together as one to make further progress.

Since its foundation, Yaskawa Electric has consistently focused on “electric motors and their applications.” With motor technology as its core, Yaskawa has developed its technology from motors in coal mining facilities to steel and material production facilities, factory automation, and i<sup>3</sup>-Mechatronics, while sincerely meeting the needs of the market and customers in each era. It is Yaskawa Group's ability to contribute to society through industry to present a path toward the realization of the ideal production site that customers want by using “motors and their applications” technology. I believe that this continuation is our existential significance and mission.

Our customers' business environment is evolving every day. Accordingly, their expectations and requests for the Yaskawa Group will increase in the future. In this environment, I would like to work with our employees to realize the unique social contribution that the Yaskawa Group can make. It is a great challenge, but I will take the lead in our efforts to further develop the Yaskawa Group.

*M. Ogawa*

Masahiro Ogawa  
Representative Director, President

## What I want to accomplish as the President

One day in November 2022, when I visited the president's office for a business meeting, Mr. Ogasawara, the Chairman of the Board, (the former President) asked me to become the next President. The timing was unexpected, but in one minute, I was determined to become the President and replied with my acceptance. I had overseen the Robotics business for 7 years until FY2022, and during that time, I always tried to operate the business with total optimization, so I was not reluctant to take responsibility for the entire company and make decisions as the President. I determined my mind when I was actually asked.

What I think I should accomplish as the President is to think about and implement "How we should respond to current events and expectations from markets and customers in our current position" to make Yaskawa a company that will continue to develop for the future. My role is not to drastically change what we have done in the past, but to add something extra to the present and connect it to the future while being conscious of the sustainability of growth.

In addition, in these days when supply chains are expanding globally, it is necessary to take an event that occurs anywhere in the world as our own. In order to be a robust company that can respond flexibly to global events, it is necessary to instill Yaskawa principle and i<sup>3</sup>-Mechatronics as guidelines for the conduct of all employees and to build a corporate culture. When it becomes a culture, the conduct of employees is aligned, and it is more likely to be inherited. I will be a leader in fostering a corporate culture and create the foundation for the Yaskawa Group's continued growth in the future.

## The review of previous mid-term business plan "Challenge 25 Plus"

The previous mid-term business plan "Challenge 25 Plus" ended in FY2022, but the actual situation was very different from that assumed in FY2019. The U.S.-China trade conflict started, and economic activity and human movement were restricted by the COVID-19 pandemic. After the resumption of economic activity, there was a shortage of electronic components, mainly semiconductors, due to a rapid recovery in demand, and we also faced rapid fluctuations in foreign exchange rates and inflation. All of these changes in the environment were unexpected, but it is very valuable that we could achieve the revenue and operating profit targets set out in "Challenge 25 Plus" in this situation. However, I recognize that how to handle the shortage of parts remains as a challenge, so we will take measures to fulfill responsibilities to supply in a stable manner under the new mid-term business plan, "Realize 25."

Another major achievement of "Challenge 25 Plus" is that we were able to confirm that the measures the Yaskawa Group has taken so far was correct. The Yaskawa Group's global management, which is characterized by autonomy for each region and local production, worked effectively against fluctuations in foreign exchange rates. Although we cannot control fluctuations in foreign exchange rates, we were able to build a resilient system. This is also an effective response to geopolitical risk and decoupling. I believe that it is worthwhile to further strengthen this resilient global system, and this realization is reflected in "Realize 25."

Also in the period of "Realize 25," unexpected environmental changes are inevitable. In my personal experience, it has definitely helped me to become aware of my shortcomings and continue to learn to compensate for them as I proceed to my goals. I believe that the Yaskawa Group can become a stronger company by gaining awareness by tough changes and challenges and gaining experience to overcome them.

## Strategy of the new mid-term business plan "Realize 25"

The goals of "Realize 25" are also the goals of our long-term business plan, "Vision 2025" (FY2016 – FY2025). Of course, as the President, I am also looking at the sustainable growth of the Yaskawa Group beyond FY2025, but first I will have all of our employees focus on achieving "Vision 2025."

The strategy of "Realize 25" to realize "Vision 2025" is to strengthen our execution capabilities. By launching new products early in the mid-term business plan period and revitalizing our existing business foundation for development, production, sales, and services, we will grow in both volume and quality. At the same time, we will work to re-strengthen our global supply chain to prepare for the next further growth.

In the PDCA cycle, "Realize 25" is a period of "Do." Awareness in this period leads to challenges for the next mid-term business plan. I don't want to see similar challenges on the agenda of the discussion after three years without tackling them now. We have decided what we are going to do and how to do it, so what we should do now is to just do it with determination. The management, including general managers and division managers, recognize their roles and act in response to the direction of the entire company, and take proper responsibility for the results. As the head of the company, I will take responsibility for the direction that we have decided as a company.

Since we launched the concept of i<sup>3</sup>-Mechatronics in 2017, we have been pushing hard to transform our business model. Now is the right time for us to align the direction of everyone from the management to employees to get our new business model off the ground and get the results. We aim to achieve the goals of "Realize 25" by ensuring that we execute what we have decided through actively communicating with employees using the discussion\* opportunities, as well as through applying detailed PDCA cycle through discussion with the management.

\* About 10 meetings for direct discussion between the management and employees are held in a year.





## Yaskawa group's sustainability goals

"We realize i<sup>3</sup>-Mechatronics with the core motor technology and contribute to customers. As a result of that, social value is created, and social problems are solved." As a technology-driven company, I believe that making progress toward achieving this is what we should be headed for. In one of our sustainability goals, "realize revolutionary industrial automation with partners through i<sup>3</sup>-Mechatronics," Yaskawa expresses what it should be, and we emphasize this the most. We will also implement "Build clean social infrastructure and foundation for safe and comfortable living" and "Develop new technologies and business domains through open innovations." At present, attention is focused on addressing environmental issues such as reducing CO<sub>2</sub> emissions in order to achieve carbon neutrality, but if we broaden our horizons to the SDGs, social issues will become even more diverse. I believe that sustainability goals will change depending on which issues we focus on and when, but "Realize revolutionary industrial automation with partners through i<sup>3</sup>-Mechatronics" is our belief that expresses ourselves that have consistently pursued "electric motors and its applications." And for the Yaskawa Group to achieve sustainable growth while responding to social challenges and market demands, we need to upgrade production, human resources and governance.

## Aiming to make further strides by making the most of diversity as driving force

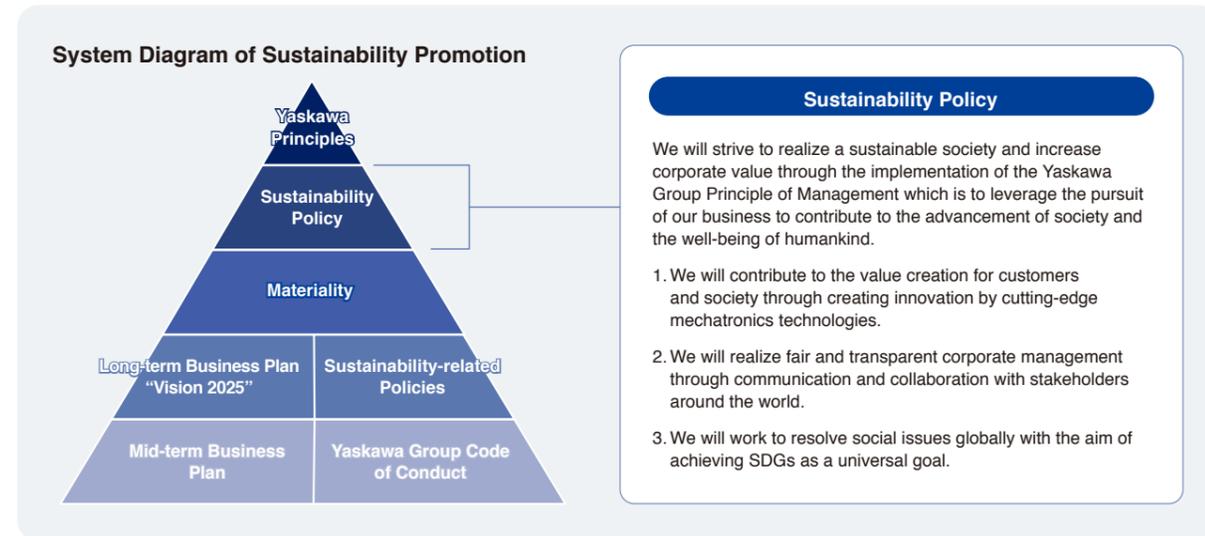
We aim to achieve "Vision 2025" and "Realize 25" through initiatives to meet the Yaskawa Group's sustainability goals, which are our important KGIs, while making "the roles assigned to each employee and their achievements surely lead to our ultimate goal, the Yaskawa Principles" the common understanding of the Yaskawa Group as a whole. I respect and support the personalities, aspirations, and diversity of our employees, who are the cornerstones of our business operations, as long as they are in line with the company-wide direction. This is because I believe that the source of energy that drives our organization comes from "a gap". People have unique ways of thinking and approaching by the difference of genders, generations, handicaps, and cultures. The driving force generated by them in an organization is invaluable. It must be used to move the company toward company-wide goals.

In recent years, because new products to realize i<sup>3</sup>-Mechatronics, such as the YRM-X controller, Σ-X, and MOTOMAN NEXT, have been developed, the global understanding of i<sup>3</sup>-Mechatronics has improved. By using the diversity existing within the Yaskawa Group as the driving force to meet local demand, we will achieve further growth.

Servo motors, AC drives, and robots are devices that are used in the entire industry. The Yaskawa Group has a unique strength to possess these products as its core products and I believe that we will be able to support industry and society more broadly by increasing the number of partners. We are committed to contributing to our customers and society and creating value through the implementation of i<sup>3</sup>-Mechatronics by working together as one globally based on Yaskawa Principles. Please look forward to our further progress and I appreciate your continued support.

## Sustainability Policy and Initiatives

Under the Yaskawa Principles, Yaskawa Group formulated its Sustainability Policy in FY2021. In line with this policy, we identify material issues and develop targets for long-term and mid-term business plans to promote sustainability strategically. In addition, we will monitor progress and implement the PDCA cycle to achieve a sustainable society and increase corporate value.



### Sustainability Challenges and Targets (Materiality)

In regard to sustainability challenges and targets (materiality), we identified issues of high importance by evaluating trends in the international community and social issues that are closely related to us from two perspectives: "importance to stakeholders" and "importance to Yaskawa." These issues were discussed at internal meetings, including those of the Board of Directors, and issues of particular importance were

identified as materiality. Moreover, we have clarified the direction of each focus area and strategy, and set quantitative and qualitative KPIs. Through the resolution of identified materiality issues, we are working to realize a sustainable society and increase corporate value, which we aim to achieve under our sustainability policy.



### Sustainability Promotion System

Our company has established a Sustainability Committee chaired by the President.

This committee is attended by heads of related divisions and outside directors as advisors to promote sustainability management for the Group as a whole. It also plans, deliberates, develops among the Group, and monitors priority measures and policies related to materiality.

Sustainability initiatives are regularly reported to the Board of Directors and the Management Committee.

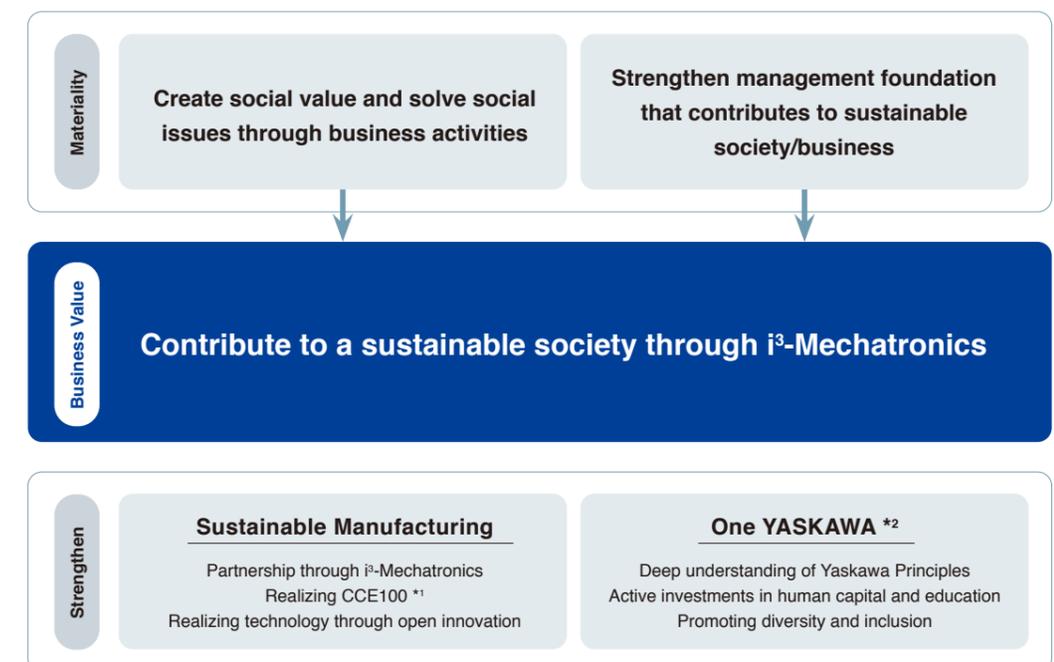
In FY2022, the Sustainability Committee met in April and October 2022. In addition to internal management, outside directors participated in lively discussions on KPIs for each materiality.



### Concept of Sustainability Promotion in the Mid-term Business Plan "Realize 25"

Our group will enhance its business value of "contributing to a sustainable society through i<sup>3</sup>-Mechatronics" by promoting materiality initiatives. We will use the challenges in

the previous mid-term business plan "Challenge 25 Plus" as reinforcement points in the current mid-term business plan "Realize 25" and aim to develop targets.



\*1 CCE100 (Contribution to Cool Earth 100): Target to reduce CO<sub>2</sub> emissions from our products by more than 100 times by 2025

\*2 One YASKAWA: Initiatives to promote a corporate culture that brings the Yaskawa Group together by promoting the penetration of Yaskawa Principles on a global scale.

# Sustainability Challenges and Targets (Materiality) and Their Progress

Our group's materiality initiatives and progress are described below. Through the Sustainability Committee, we monitor KPIs on an ongoing basis and implement the PDCA cycle to achieve our goals and realize our vision.

Sustainability Challenges and Targets and Related SDGs	Desired Outcomes	Initiatives [Targets]	FY2022 Results	
<b>Create Social Value and Solve Social Issues through Business Activities</b>				
1. Realize revolutionary industrial automation with partners through "i <sup>3</sup> -Mechatronics"	Solve customer management issues with i <sup>3</sup> -Mechatronics, a solution concept	• Accumulation of "i <sup>3</sup> -Mechatronics" project success cases	• Strengthened customer approach with key products (YRM-X controller, Sigma-X series, YASKAWA Cockpit) based on i <sup>3</sup> -Mechatronics concept • Expansion of results through collaboration with top manufacturers in each industry	
2. Build clean social infrastructure and foundation for safe and comfortable living	Use Yaskawa's technological capabilities to improve the environmental performance of products and reduce the environmental impact of the world by expanding sales	• Achieve CCE 100 (Contribution to Cool Earth 100) [FY2025: 100 times]	• 67.4 times	
	Apply and expand Yaskawa's existing mechatronics technology and take on new domains	• Expanding examples of mechatronics technology applications	• Promoted initiatives in mechatronics application areas with a focus on energy conservation, clean power, food and agriculture, and humatronics	
3. Develop new technologies and business domains through open innovations	Leverage M&A / Alliance to provide feedback on business expansion and technology in new areas	• Strengthen initiatives in new areas through M&A and alliances	• Continued aggressive search for growth opportunities through M&A/alliances to create technological synergies in our company's business areas of factory automation and mechatronics applications	
	Promote external collaboration to develop the world's first and best technologies and products	• Reinforcement of Industry-Academia-Government collaboration	• Promoting Industry-Academia-Government collaboration in and outside Japan on research and development that contributes to our company's future technologies	
	Demonstrate business synergies through venture investment and collaboration	• Expansion of venture investments by YIP*1	• Venture investments: 2 (Cumulative number: 19)	
<b>Strengthen Management Foundation that Contributes to Sustainable Society/Businesses</b>				
4. Sustainable and productive manufacturing	Promote global production efficiency and optimization through domestic and overseas expansion of the "Yaskawa Solution Factory" concept	• Introduction of cutting-edge manufacturing	• Improving production efficiency at own plants (improving productivity indicators*2) [FY2022: +19%*3 FY2025: +23% (compared to FY2019)]	
	Reduce CO <sub>2</sub> emissions and address global climate change issues	• Reduction of greenhouse gas emission through the Green Process	• Reducing greenhouse gas (CO <sub>2</sub> ) emissions [FY2025: -30%*4 (compared to FY2018)]	
	Provide optimal maintenance throughout the life cycle with the ultimate goal of "not stopping customer equipment"	• Improvement of product safety and quality	• Product safety through our group's Product Liability Committee [Fiscal 2022: Strengthening global development of activities to pinch off the "bud of PL" *5] • Improving product quality through the introduction of new systems [FY2022: Start of global operation of market quality information centralized system]	• Global development of activities to pinch off the "bud of PL" (No. of buds: 19, Product improvement development: 1) • Centralization of quality information on a global scale (managing market quality information by coding and centralizing data from global production sites)
	Implement supply chain management based on adherence to sustainable procurement guidelines	• Construction of a sustainable supply chain	• Improving the rate of compliance with Sustainable Procurement Guidelines [FY2022: Compliance rate: 100%*3 (target: major suppliers of Yaskawa Electric) FY2025: Compliance rate: 100% (target: major suppliers of Yaskawa Group)]	• Compliance rate: 100% (target: major suppliers of Yaskawa Electric)
5. Create a rewarding workplace and human resource development	Demonstrate the strengths of diverse human resources by promoting the active participation of women	• Diversity and inclusion	• Raising the ratio of female managers [FY2025: Non-consolidated/Group in Japan: Double (compared to FY2021)]	
	Develop human resources based on personnel philosophy and improve the job satisfaction of employees	• Human resource development	• Increase the ratio of professional human resources*6 [FY2025: Corporate average 75% or more*3]	
	Eliminate work stoppage accidents and create a safe workplace	• Occupational safety	• Improvement of lost-time injury frequency rate [FY2025: Non-consolidated: Maintain 0.2 or less Major production bases in Japan and overseas: Maintain 0.4 or less]	• Lost time injury frequency rate: 0.00 (non-consolidated), 0.12 (domestic group), 0.22 (global)
	Raise employees' awareness of human rights and create a workplace where human rights are respected	• Human rights and work practices	• Implementation and establishment of human rights due diligence processes for employees [FY2022: Implementation of human rights due diligence for group companies in Japan FY2025: Implementation at all global sites]	• Implementation of human rights due diligence for domestic groups Assess the current status of initiatives at major global sites
	Promote social contribution activities to coexist and co-create with local communities by developing human resources for the evolution of manufacturing	• Contribution to local communities	• Development of human resources in science and engineering who will realize "evolution of manufacturing" [FY2022: Launch of a new manufacturing human resource development program]	• YASKAWA Innovation Center Visitors: 7,837 Implementation of a new manufacturing human resource development program
6. Fair and transparent governance system	Promote sustainable growth and increase corporate value through constructive dialogue with investors	• "Aggressive" governance system utilizing the Corporate Governance Code	• Implementation of the Principles of the Corporate Governance Code (Reasonable explanation where not implemented)	
	Raise the level of the security organization and build an autonomous and continuous information security system	• Strengthening of information security	• Internal and external security monitoring/measures in systems and security level evaluation/improvement by external auditing organizations	
	Prevent escalation by early detection of compliance risks	• Enhancement of compliance	• Strengthen compliance through internal reporting	• Continued appropriate responses to whistleblowing and other compliance issues

\*1 Abbreviation of Yaskawa Innovation Program. New business creation scheme with CVC functions launched in FY2016  
\*2 Revenue per person for indirect and direct personnel at plants in Japan (compared to FY2019)  
\*3 Target was revised in April 2022.  
\*4 The target value was changed following the revision of the 2050 carbon neutral target in May 2022.

\*5 Target was set in October 2022.  
\*6 A person at the level of being able to teach others or perform alone in the skills within a task to which he or she is assigned  
\*7 Target was revised in October 2022.  
\*8 Percentage of all skill items set at the end of FY2022 that are at or above a certain skill level

The Yaskawa Group has set forth its “Vision 2025” (FY2016 to FY2025), a long-term management plan for 10 years, with the starting point of FY2015, which is its centenary. Our basic policy in Vision 2025 is to contribute to the resolution of our customers’ management issues through the evolution of our core business, and to create new added value for society through the expansion of new fields utilizing mechatronics technology.

**External Environment for 2025**

Changes in global population structure, such as declining birthrate and aging of developed countries

Environmental problems and climate change caused by expansion of energy consumption

Rapidly evolving telecommunication technologies such as 5G communication and IoT

**Yaskawa Principles**

**Yaskawa’s mission is to contribute broadly to social development and human welfare through the execution of our business.**

- Quality** Always developing and improving world-class technologies with a focus on quality
- Profitability** Working to improve management efficiency and secure Profit necessary for the sustainable growth
- Market** Serving the needs of our customers and pursuing customer satisfaction

**Yaskawa’s FY2025 Goals**

**Respect Life**

We aim to contribute to improving quality of life and building a sustainable society with technologies accumulated over the past century.

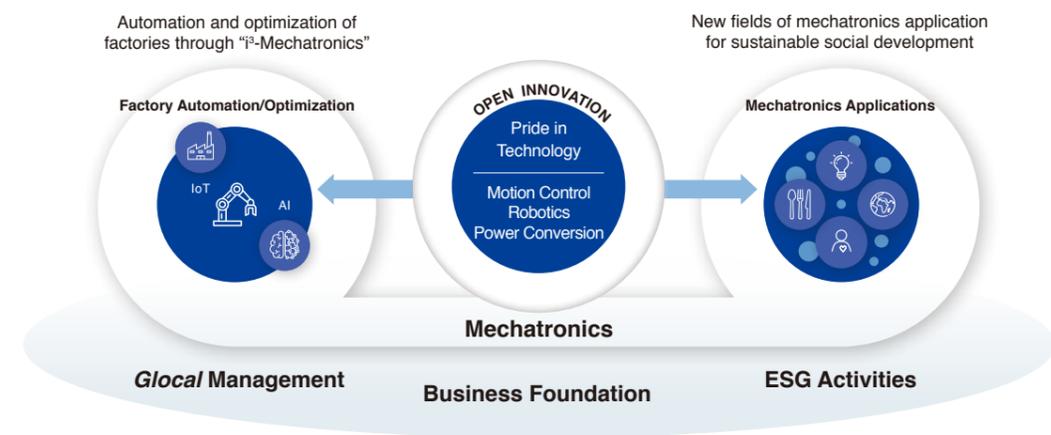
**Empower Innovation**

We venture in new technologies/domains/targets to bring excitement and enthusiasm to people.

**Deliver Results**

We promise to deliver assured results to stakeholders, while continuously enhancing business execution capabilities.

**Vision 2025**



**Financial Targets for FY2025**

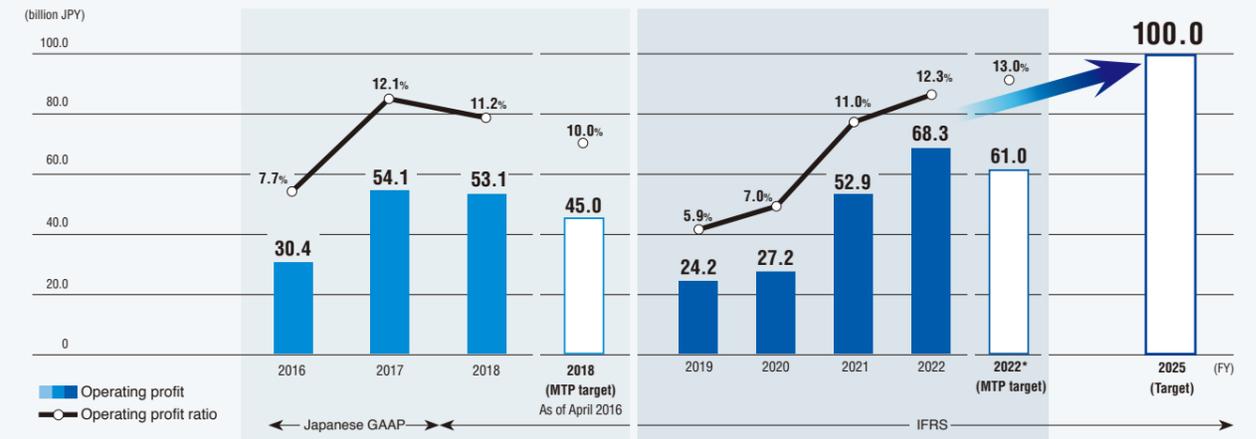
Set “Operating Profit” as the most important KGI to be achieved in FY2025

Operating Profit	ROE*1	ROIC*2	Dividend Payout Ratio
Over 100 billion JPY	15.0% or more	15.0% or more	30.0%+α

\*1 ROE: Return on Equity = Net income attributable to owners of parent/Shareholders’ equity  
 \*2 ROIC: Return on invested capital = Net income attributable to owners of parent/Invested capital

**Progress of Vision 2025**

Yaskawa has divided the 10 years of Vision 2025 into three mid-term business plan periods and is working to achieve this goal. With the completion of the first two mid-term business plan periods in FY2022, we are steadily approaching our vision and goals.



Long-term business plan	Vision 2025							
	Mid-term business plans		Challenge 25 Plus		Realize 25			
	2016	2017	2018	2019	2020	2021	2022	2022* (MTP target)
Net sales / Revenue (billion JPY)	394.9	448.5	474.6	411.0	389.7	479.1	556.0	470.0
Capital expenditure, M&A (% of revenue)	70.3 (5.3%) *Period total			103.2 (5.6%) *Period total				
R&D investment (% of revenue)	57.8 (4.4%) *Period total			73.8 (4.0%) *Period total				

\* In response to changes in the business environment, in April 2021 we extended the final year of Challenge 25 (FY2019 - FY2021) by 1 year and revised our targets.

Basic Policies	Establish profitable business structure	Challenge for creating new values and markets Profitability improvement
<ul style="list-style-type: none"> <li>Maximize results of “Realize 100”</li> <li>Build foundation for realizing “Vision 2025”</li> <li>Grow clean power as core business</li> <li>Evolve <i>Glocal</i> management</li> </ul>	<ul style="list-style-type: none"> <li>Transform business model through i3-Mechatronics</li> <li>Maximize profitability in the growing market through i3-Mechatronics</li> <li>Expand new domains for building a sustainable society</li> <li>Improve management efficiency through digital and quality management</li> </ul>	
Results	<ul style="list-style-type: none"> <li>Launched i3-Mechatronics</li> <li>Strengthened sales capability by integrating sales functions</li> <li>Expanded local production in demand areas, particularly in China and Europe</li> <li>Full-scale launch of food production automation business</li> <li>Establishment of AI solution development subsidiary</li> <li>Market launch of new products for solar power generation</li> </ul>	<ul style="list-style-type: none"> <li>Structural reform of robot production</li> <li>Started operation of YASKAWA Technology Center</li> <li>Market launch of Σ-X, YRM controller</li> <li>Captured demand for EV and battery-related capital investment</li> <li>Centralized global data with YDX</li> <li>Formulation of sustainability policy and identification of materiality</li> </ul>
Challenges	<ul style="list-style-type: none"> <li>Strengthen new product development capabilities to realize i3-Mechatronics</li> <li>Strengthen i3-Mechatronics penetration and solution proposal capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Expand partners to introduce i3-Mechatronics</li> <li>Strengthen production capacity by accelerating automation and in-house manufacturing</li> <li>Monetize the food and agriculture and biomedical sectors</li> </ul>

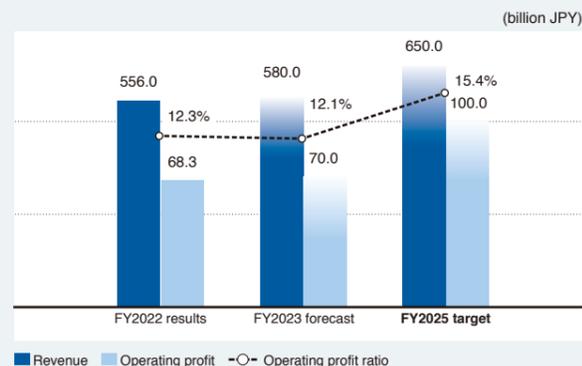
The Yaskawa Group launched mid-term business plan “Realize 25” for 3 years from FY2023 to FY2025 in order to achieve its long-term management plan “Vision 2025” and sustainable growth beyond that.



### Financial Targets

The financial targets of Realize 25 are as follows. As for investments, we plan to invest a cumulative total of 150 billion yen over three years to solidify future sustainable growth. The main objectives of the investments are to improve value added through the expansion of in-house manufacturing and automation, the restructuring of factories and business sites, and the strengthening of local production in demand areas.

Revenue	Operating profit	Operating profit ratio	ROE	ROIC	Dividend Payout Ratio
650.0 billion JPY	100.0 billion JPY	15.4%	15.0% or more	15.0% or more	30.0%+α



### Aim and Policies

Providing new values by expansion of i<sup>3</sup>-Mechatronics and evolution of robotics to achieve “Vision 2025” and contribute to realizing a sustainable society

#### Policies and Initiatives

Details of the four basic policies for achieving Realize 25 are as follows:

##### Policy 1 Creating Value through i<sup>3</sup>-Mechatronics Solutions

In order to realize solutions for our customers, we will further strengthen Yaskawa Group’s strengths in products and technologies. In addition, in order to optimally and sustainably supply these products, Yaskawa Group’s production sites will become the flagship for implementing i<sup>3</sup>-Mechatronics, and we will further enhance the competitiveness of our products by realizing cutting-edge manufacturing. By utilizing vast amounts of data on these processes, we will achieve high quality and provide sustainable solutions to our customers.

This is the solution concept of i<sup>3</sup>-Mechatronics. We will enhance our contribution to customers by realizing what they need through seamlessly connecting the “products,” the Yaskawa Group’s strengths. Through this, we will expand the scope of Yaskawa Group’s business and create further value.



#### Policies and Initiatives

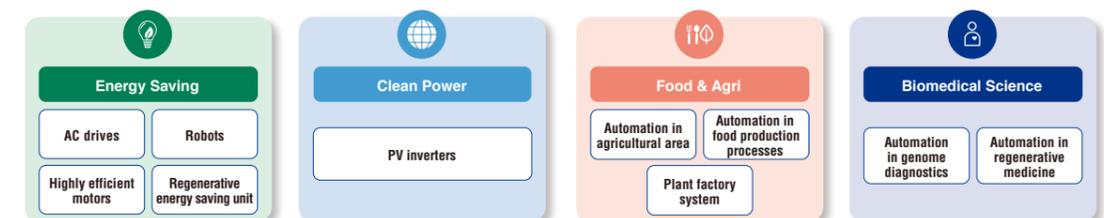
##### Policy 2 Capturing Growth Market with World’s Best/First Automation Components

In growing markets such as EVs, batteries, semiconductors, and food products, focusing on automation components, we will develop strategies for each market on a global basis to ensure that demand is captured.

In addition, we will promote cooperation between development, procurement, and production at the mother plants in Japan for each business, and strengthen our global production system based on the concept of local production in demand areas. By implementing these measures, we will realize global and stable manufacturing that is resistant to environmental changes and risks.



##### Policy 3 Contributing to Realizing a Sustainable Society through Business Expansion of Mechatronics Applications



Expand sales of “green” products to improve customers’ energy efficiency and reduce environmental impact

Full scale business expansion based on new products realizing world-class energy creation

Combine core technologies to achieve food safety and stable supply

Bring brighter future for all people

##### Policy 4 Establishing a Management Foundation by Deepening YDX and Sustainability Management

###### Providing New Value through YDX Chain Based on PLM\*1 Restructuring

By restructuring product life cycle management by connecting data from the origins of “products,” the flow of production, and information on the supply chain in the process, we will advance business reforms and provide new value to our customers.

###### Promoting Sustainability Management through Strengthening Initiatives towards Materiality\*2

In our sustainability policy, we have specified the materiality, including setting KPIs, of our contribution to society through i<sup>3</sup>-Mechatronics. We will strengthen these initiatives through PDCA. We will also focus on the people who support our business. We aim to achieve “One YASKAWA,” in which the Yaskawa Group unites by promoting the penetration of Yaskawa Principles globally.

\*1 PLM: Product Lifecycle Management

\*2 Please see “Concept of Sustainability Promotion in the Mid-term Business Plan “Realize 25” on page 18.



**We will increase the added value through i<sup>3</sup>-Mechatronics and launching new products, and achieve the operating profit of 100 billion yen in FY2025.**

**Shuji Murakami**

Representative Director,  
 Senior Managing Executive Officer

**Summary of “Challenge 25 Plus”**

As a second step in the 10 years toward realizing “Vision 2025,” “Challenge 25 Plus,” which was from FY2019 to FY2022, has been positioned as a period to take on “challenges for creating new values and markets,” and we have been able to steadily advance the transformation of our business model with “i<sup>3</sup>-Mechatronics” at its core and the maximization of revenue in growth markets through this transformation. In particular, we have been able to instill the concept that “expanding customer value by providing technology and products that contribute to the improvement of manufacturing and

the evolution of business that customers demand will also benefit Yaskawa” in our company and take actions toward this goal, which has enabled us to further establish our business model and realize high profitability.

With regard to “maximizing profitability in the growing market through i<sup>3</sup>-Mechatronics,” a basic policy of “Challenge 25 Plus,” we have been able to steadily capture the demand related to EVs and semiconductors. In addition, while we have been actively challenging the automation of new areas such as the agricultural sector, we believe there is still room for further efforts, and we will accelerate the expansion of our business areas by increasing

partner cooperation in various fields.

On the profitability side, we were not able to achieve our target of 13% operating profit ratio due to the impact of high material cost. However, we are gradually proceeding with price pass-through in line with surging material cost, so even though there is a time lag, I believe that we can recover. In addition, by applying the medium- to long-term compensation system to our employees, we were able to motivate them to prioritize operating profit and foster a corporate culture that encourages employees to take on ambitious challenges.

**Assumption of Business Environment (Opportunities and Risks)**

The market environment surrounding Yaskawa was very favorable until FY2022. As a reaction, we assume that capital investment will be restrained in FY2023 against the backdrop of rising interest rates in Europe and the U.S. and inventory adjustments. However, the business environment in Yaskawa is not bad at all, and the supply chain disruption caused by the parts shortage is on a recovering trend. It is expected that the revenue and operating profits will increase by making sure that the backlog of orders accumulated will be filled. In the medium to long term, investment for automation and demand for semiconductors are expected to grow, and the order environment is expected to normalize after 2024.

On the other hand, we assume the demand decline in China and global inflation as risks to be addressed. In China, we do not expect a sharp increase in capital investment that we have seen in the past, partly because the manufacturing industry has been too concentrated in China. We will lose opportunities if we do not appropriately capture opportunities of manufacturing industries being established in other regions to replace China. Nevertheless, we assume that domestic demand will be revitalized in China, so we will grasp the trend of domestic production of semiconductors and seize opportunities without missing out on new changes and developments. As for inflation, although it will subside as supply-side investment progresses, it is expected that global wage increases will be reflected in prices, and the profits

may be put under pressure if we do not respond appropriately. We will absorb the effects of inflation by proposing automation for customers and promoting internal automation to increase value-added and productivity.

**For the Achievement of “Realize 25”**

In the new mid-term business plan “Realize 25,” announced in May 2023, we plan to substantially increase the revenue to 650 billion yen and the operating profit to 100 billion yen. In order to achieve 100 billion yen in operating profit, revenue also needs to increase over the 3 years of “Realize 25,” and we will secure orders by responding to market changes. In addition, we will develop a high value-added business through “i<sup>3</sup>-Mechatronics,” reduce costs by launching new products and promote price pass-through, and improve value-added through in-house manufacturing and automation. We expect to increase approximately 23 billion yen in operating profit through the effects of value-added from FY2022 to FY2025. As for expenses, we will control the increase of the cost within a certain percentage of the added value due to the increase in revenue.

The key is how to increase value-added, so we will implement i<sup>3</sup>-Mechatronics by combining technology, production, sales, and quality to promote business model transformation.

If we can control volume, quality, and cost, we can foresee 100 billion yen of operating profit. We have been working based on this idea but will further enhance our activities and achieve our goal.

**Realize 25 Financial Targets**

Revenue	Operating profit	Operating profit ratio	ROE	ROIC	Payout ratio
650.0 billion yen	100.0 billion yen	15.4%	15.0% or more	15.0% or more	30.0%+α

**Financial and Capital Strategy in “Realize 25”**

Yaskawa has set targets of 15% for ROE and ROIC and a dividend payout ratio of 30%+α, to achieve more returns against the 10% of cost of equity and 9% of WACC. This target has not been changed from the previous mid-term business plan. However, in order to maintain ROE of 15%, we

need to achieve operating profit growth of at least 10% per year, and in order to maintain ROIC of 15%, we need to limit the increase of borrowing to about 10%. In FY2022, borrowing increased due to strategic inventory build-up and the shortening of payment period, resulting in falling short of our ROIC target. In the 3 years of "Realize 25," it is necessary to keep borrowing at an appropriate level and increase capital efficiency to recover from the current situation. In FY2022, due to the supply shortage of parts, inventory was built up because all necessary parts were not gathered completely. We will optimize our borrowing by filling the backlog of orders.

If we can reduce our borrowing and achieve ROIC of 15%, we will be able to use the cash generated from our profits for the investment. Our cumulative investment plan is 150 billion yen (about 8% of the revenue), which is a more ambitious target than the previous ones. We plan to use cash effectively and make further up-front investments to improve efficiency and value-added, such as restructuring our factories and business sites, increasing in-house manufacturing and automation, and expanding production in areas with high demand.

**Cumulative investments and breakdown**

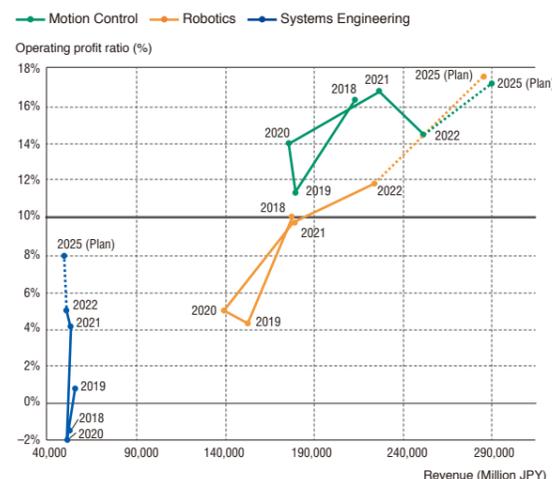
Former mid-term business plan "Challenge 25 Plus" (FY2019 to FY2022) 4 years total (results)	New mid-term business plan "Realize 25" (FY2023 to FY2025) 3 years total (forecast)
<b>103.2 billion yen (5.6% of revenue)</b>	<b>150 billion yen (8.0% of revenue)</b>
Investment for technological development efficiency and production expansion in demand areas •Construction of YASKAWA Technology Center •Construction of an industrial robot factory in Europe •Construction of a parts factory in China	Up-front investment to improve efficiency and value-added •Restructuring factories and business sites •In-house manufacturing and automation •Strengthening production systems in areas with high demand

**Concept of Business Portfolio Management**

The segments of the Yaskawa Group consist of customers in similar industries and have similar production systems, so there is no significant difference in working capital or labor equipment

ratio. Therefore, rather than using the ROIC of each business as a judgment index, we will focus on operating profits and aim to achieve the 10% operating profit ratio or higher in each business. If we cannot maintain an appropriate operating profit ratio, we will prioritize profit over revenue and work to increase profitability by selecting and concentrating areas of focus within the segments. Since Yaskawa already specializes in the industrial automation field, I believe that not only profitability but also synergies between segments are important.

**Revenue and operating profit ratio by segment in the previous mid-term business plan, "Challenge 25 Plus" and the plan for the final year of the current mid-term business plan, "Realize 25"**



In addition, Yaskawa's ROE is higher due to its higher leverage compared to the sector peer companies, but its capital costs are also higher due to significant changes in the business performance. In order to increase the equity spread, in other words, to lower capital costs, I believe it is important to steadily increase profitability in Robotics which has businesses with a wide range of end-users in order to absorb profit fluctuations of Motion Control, which are subject to market fluctuations of semiconductors and electronic components.

**The Basic Concept of the Balance Sheet Structure**

I believe that it is better to maintain the level of cash low. With regard to current assets, our policy is to maintain cash on hand at a level of about one month revenue, while controlling the global distribution of cash so that there is no surplus.

With regard to inventory, we will continue our policy of maintaining stocks at the strategically necessary level, but we will optimize what is considered surplus created when addressing the supply shortage of parts by filling the backlog of orders.

With regard to the capital structure, I believe that a ratio of equity attributable to owners of parent of 50% or more is the level at which stable management can be achieved. Although the amount of retained earnings for future capital investment will increase in the future, we will focus on efficiency while keeping a certain net D/E ratio as a guideline to prevent excess cash and capital.

**Concept of Cash Allocation**

Although free cash flow in FY2022 was temporarily negative due to strategic component inventory build-up, we plan to secure cash in line with the profits by optimizing inventories in FY2023. We plan to increase capital investment for future growth over the next 3 years, but also plan to increase operating profits, too. This will allow us to secure more free cash flow than before.

With regard to shareholder returns, the dividend payout ratio will be 30%+α. We will give back to shareholders the returns through profit growth and a corresponding increase in dividends. However, if we generate more cash than expected, we will consider stock buybacks with capital efficiency in mind.

In FY2022, we started a medium- to long-term compensation system based on the degree of achievement of the mid-term business plan's target. This system provides incentives for employees to improve value-added and profitability through highly productive work. In addition, the system encourages them to join the employee stock ownership association, which is expected to increase employees' awareness of participation in management by providing incentives to increase corporate value.

**Impact of YDX (YASKAWA Digital Transformation) on the Management and Decision Making**

In the past, it took time to collect data from each subsidiary, but YDX enables us to quickly grasp the local situation. As for the company-wide budget, in the past, we used to accumulate locally generated data at the head office. However, because all raw data is gathered at the head office now, the head office can make plans with the top-down approach while reflecting the situation of each location, and each subsidiary can focus on implementation, specifically of what and how allocated resources are used for and take specific actions. In addition, the top-down plan enabled us to strategically allocate resources for the growth of the Yaskawa Group, to implement expense control based on company-wide standards, and to expand initiatives in each division that take into consideration the benchmarks of other companies in the same industry.

**To Our Stakeholders**

In FY2022, we faced adverse business conditions, such as inflation and geopolitical risks, but we took necessary measures and implemented what we had to do. As a result, the Yaskawa Group grew steadily while gaining strength, and achieved our record-high financial results.

In the new mid-term business plan, "Realize 25," launched in FY2023, we will continue to build on what we have accumulated in the past two mid-term business plans, while further improving our ability to promote business and enhancing the effectiveness of "i<sup>3</sup>-Mechatronics," the solution concept of Yaskawa, globally.

With regard to enhancing ESG information disclosure, we will enhance our discussion to raise corporate value from a medium- to long-term perspective by effectively disclosing non-financial information in addition to financial and quantitative information, of which we have expanded disclosure. Please look forward to sustainable growth of the Yaskawa Group for the future and I appreciate your continued support.

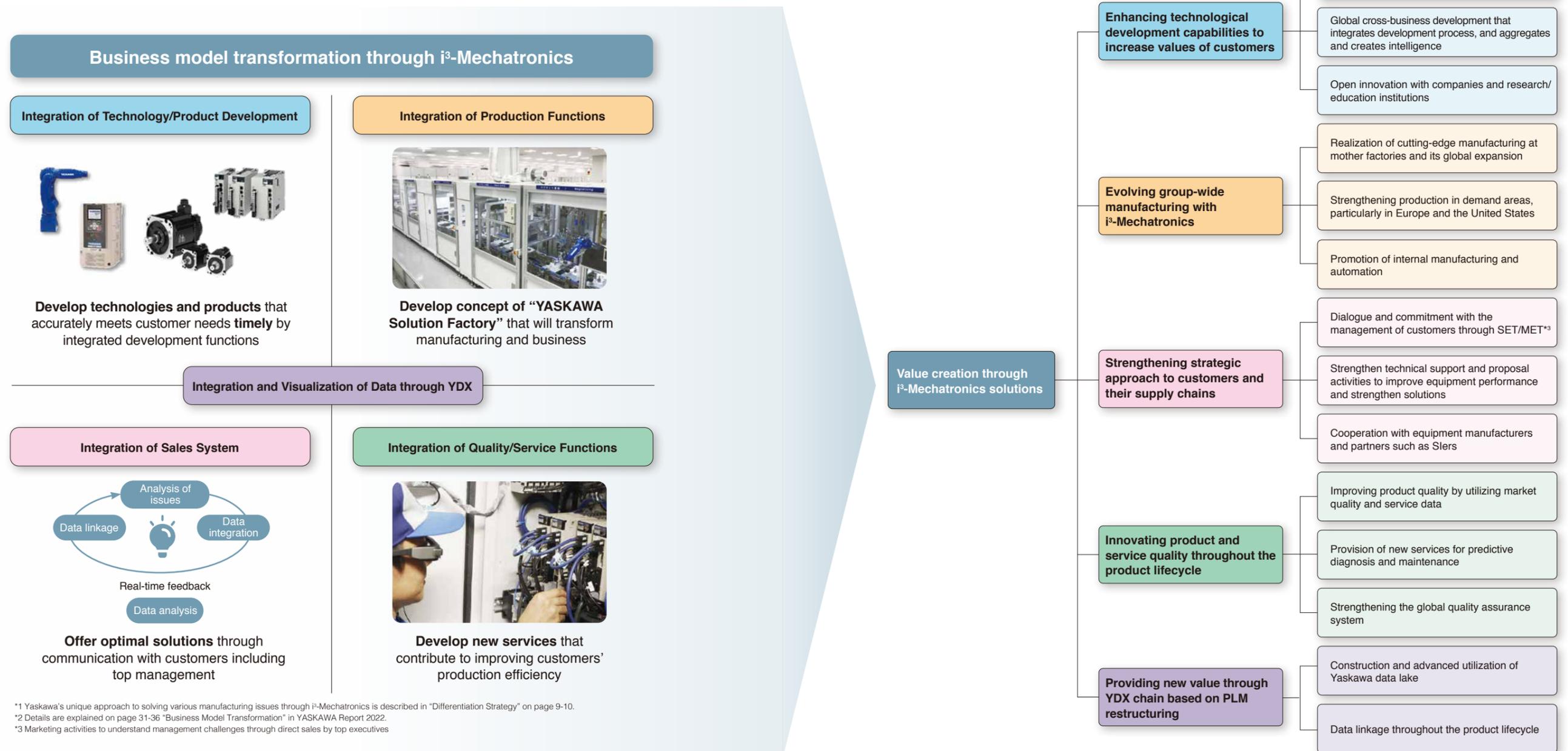
## Business Model Transformation and Initiatives for Value Creation

Yaskawa launched the i<sup>3</sup>-Mechatronics solution concept in 2017. The three “i”s of i<sup>3</sup>, integrated, intelligent, and innovative, contribute to solving customer management issues\* and are concepts that transform internal business models.

Yaskawa Group is transforming its business model by realizing and implementing the concept of i<sup>3</sup>-Mechatronics through the integration and analysis of data in YASKAWA Digital Transformation (YDX), utilizing YASKAWA Solution Factory and YASKAWA Technology Center.

In order to transform the group’s business model, we built a digital management foundation as YDX, and implemented various measures including integration of functions in the value chains of Technology/Product Development, Production, Sales, and Quality/Service in the previous mid-term business plan Challenge 25 Plus.\*2

In the new mid-term business plan Realize 25, we will enhance the effectiveness of the i<sup>3</sup>-Mechatronics business model and create value. As a result, we will further enhance our competitiveness as a manufacturing company, expand our business area, and provide customers with value-added automation solutions.



\*1 Yaskawa’s unique approach to solving various manufacturing issues through i<sup>3</sup>-Mechatronics is described in “Differentiation Strategy” on page 9-10.

\*2 Details are explained on page 31-36 “Business Model Transformation” in YASKAWA Report 2022.

\*3 Marketing activities to understand management challenges through direct sales by top executives

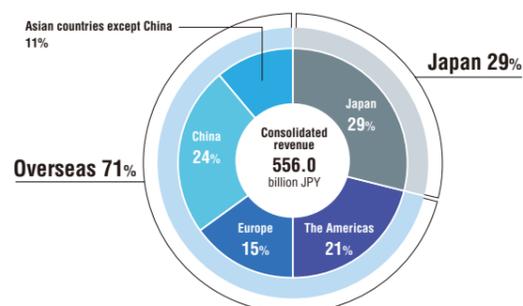
# Our Global Network



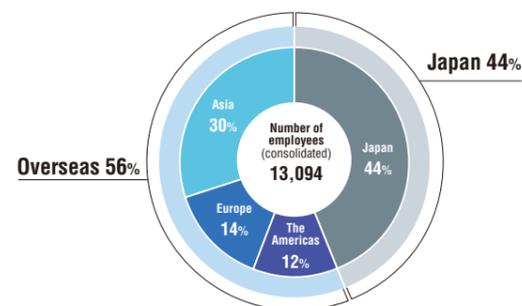
Yaskawa Group conducts optimal production at 29 sites in 13 countries and regions around the world based on its policy of production in demand areas. We strive to reduce risks associated with foreign exchange, natural disaster, and geopolitical issues while taking advantage of having manufacturing sites close to our customers in terms of delivery times and building relationships.

During the term of the mid-term business plan "Realize 25," we will invest in Japan to further improve efficiency and added value through the implementation of "i-Mechatronics," restructuring of plants and offices, and the expansion of in-house manufacturing of parts. At overseas locations, in addition to increasing capacity in demand areas in the United States and Europe, we will promote automation and in-house manufacturing in China and examine the feasibility of establishment of new parts factories for servos and drives in Southeast Asia. As a result, we will flexibly respond to changes in demand and the environment, as well as to risks, and realize stable manufacturing on a global scale.

**Breakdown of revenue by location (FY2022 results)**



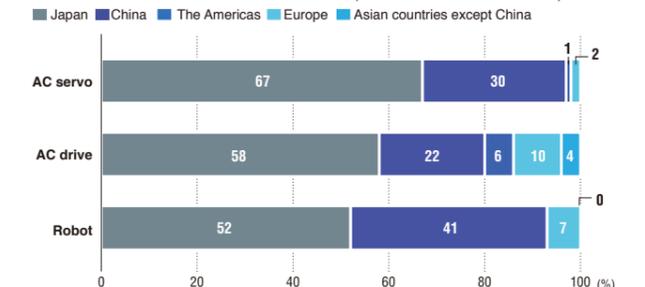
**Breakdown of personnel by region (As of the end of FY2022)**



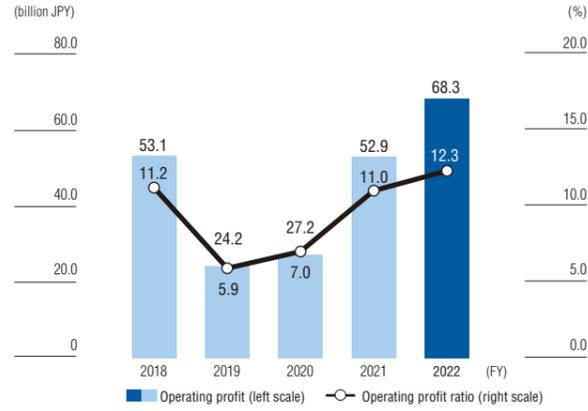
**Local procurement rate at major production sites (FY2022 results)**

YASKAWA ELECTRIC	85.4%
YASKAWA AMERICA	85.9%
YASKAWA ELECTRIC UK	66.8%
SHANGHAI YASKAWA DRIVE	92.8%
YASKAWA ELECTRIC (SHENYANG)	99.3%
YASKAWA (CHINA) ROBOTICS	91.9%
YASKAWA INDIA	30.8%

**Regional breakdown of production capacity by product (1 shift basis/FY2022 results)**

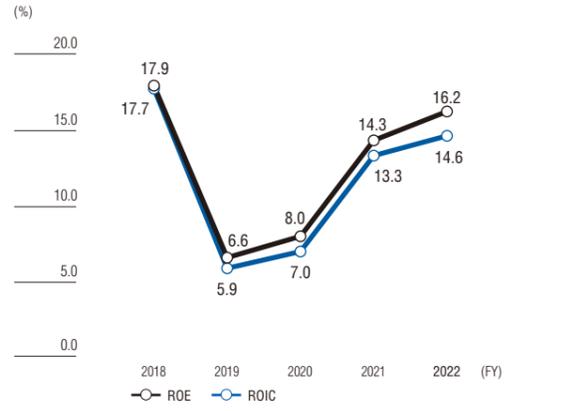


**Operating profit / Operating profit ratio**



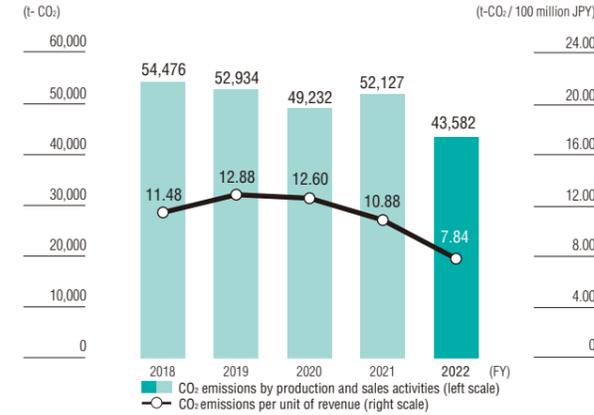
Although there was the impact of rising raw material and logistics costs and an increase in overhead costs in response to inflation, operating profit saw year-on-year growth because of the improvement in profitability due to price pass-through and the impact of the depreciation of the yen, as well as other income related to changes in the retirement pension system and the sale of real estate.

**ROE / ROIC**



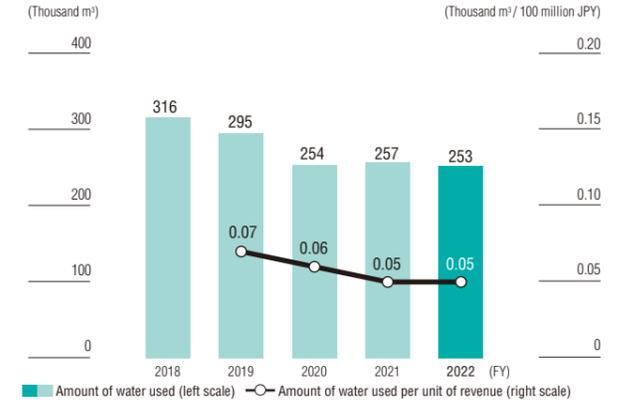
In FY2022, ROE was 16.2% and exceeded the target of 15%. ROIC was 14.6% and was below the 15% target, as a result of increased borrowings due to strategic inventory buildup and shorter payment times.

**CO<sub>2</sub> emissions by production and sales activities / CO<sub>2</sub> emissions per unit of revenue**



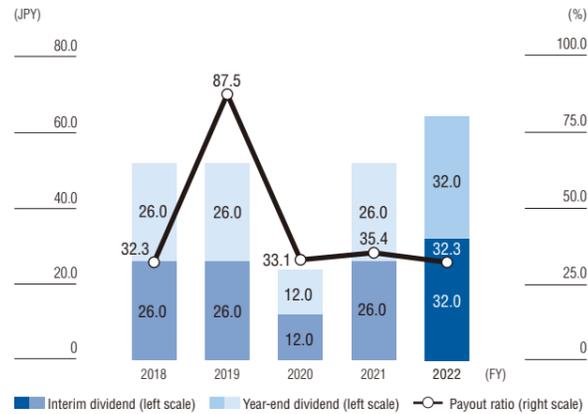
In FY2022, we made significant progress in reducing CO<sub>2</sub> emissions by switching to CO<sub>2</sub>-free electricity at Iruma Plant and by the usage of diesel oil for transport trucks with business transfer of Yaskawa Transport Corporation, a second-tier subsidiary of Yaskawa.

**Amount of water used / Amount of water used per unit of revenue**



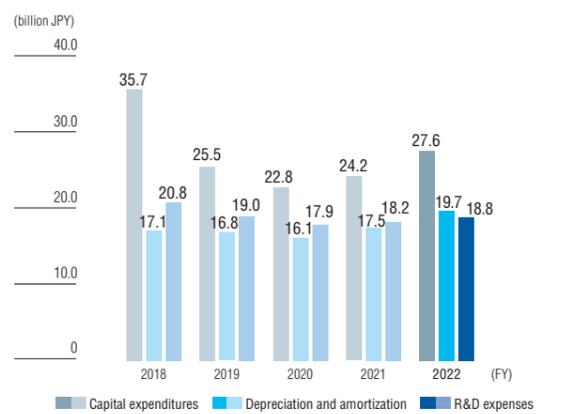
At Yaskawa, the amount of water used in the production process is small, and the impact of the increase in revenue has been minimal. Most of the water used is domestic water used by employees. In FY2022, the amount of water used and the amount of water used per unit of revenue remained at the same level as in FY2021.

**Dividends per share / Payout ratio**



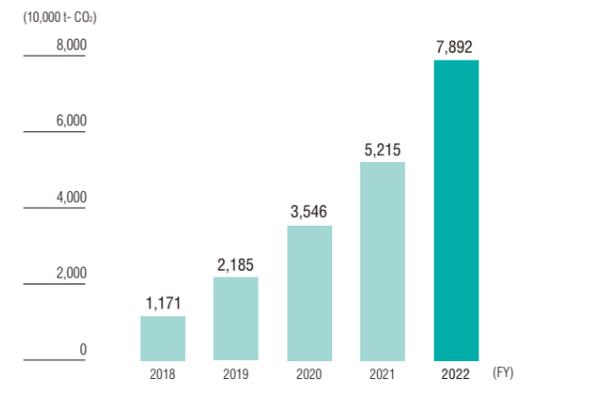
Annual dividend per share for FY2022 was record high at 64 yen, an increase of 12 yen from the previous year. The dividend payout ratio was 32.3% and kept the level of 30%+, which is the standard for our shareholder returns.

**Capital expenditures / Depreciation and amortization / R&D expenses**



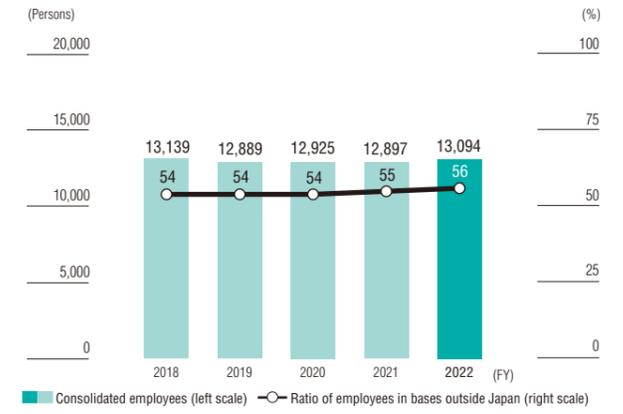
Capital investments in FY2022 increased by 3.4 billion yen from the previous year to 27.6 billion yen. We focused on our core business areas, Motion Control and Robotics, and made investments to save labor, streamline operations, and improve product reliability. In FY2022, R&D expenses increased by 0.6 billion yen from the previous year.

**Contribution to CO<sub>2</sub> emissions reduction through products (Cumulative since FY2016)**



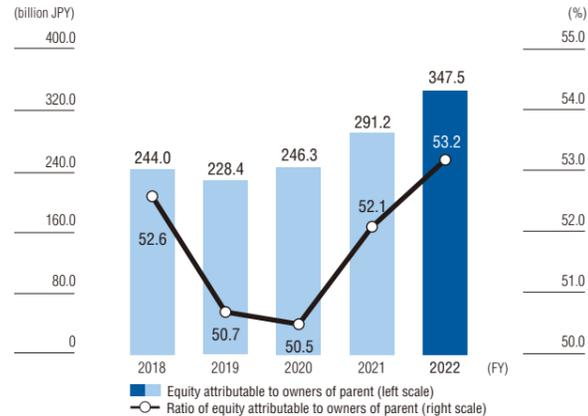
In FY2022, our contribution to reducing CO<sub>2</sub> emissions increased significantly in line with the increase in revenue of environmental contribution products. We have two new models of super green products and green products, and expect to continue contributing to the reduction.

**Consolidated employees / Ratio of employees in bases outside Japan**



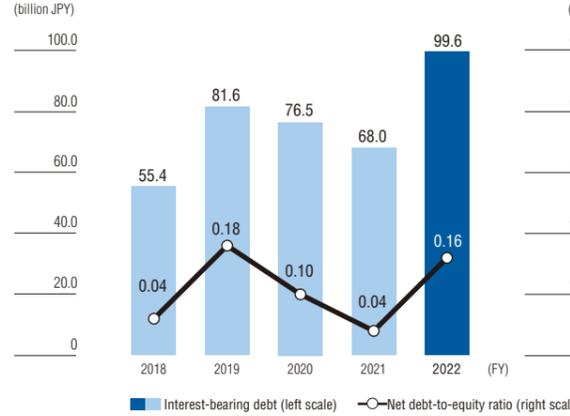
In FY2022, the number of consolidated employees increased by 197 to 13,094. Overseas employees accounted for 56% of the total and there was no significant change from the previous year.

**Equity attributable to owners of parent / Ratio of equity attributable to owners of parent to total assets**



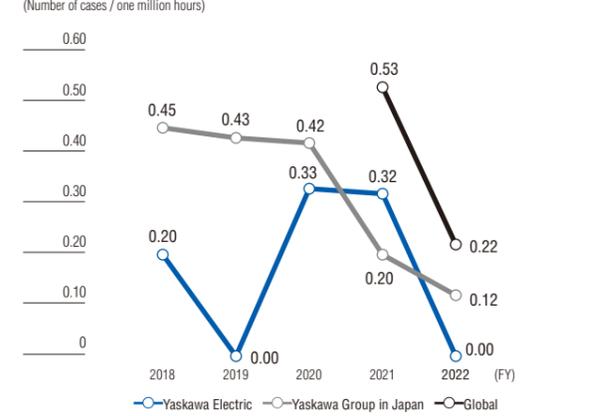
Total equity attributable to owners of parent increased by 56.3 billion yen from the end of the previous fiscal year to 347.5 billion yen. The ratio of equity attributable to owners of parent was 53.2%, which is higher than 50%, the level we consider appropriate for stable management.

**Interest-bearing debt / Net debt-to-equity ratio**



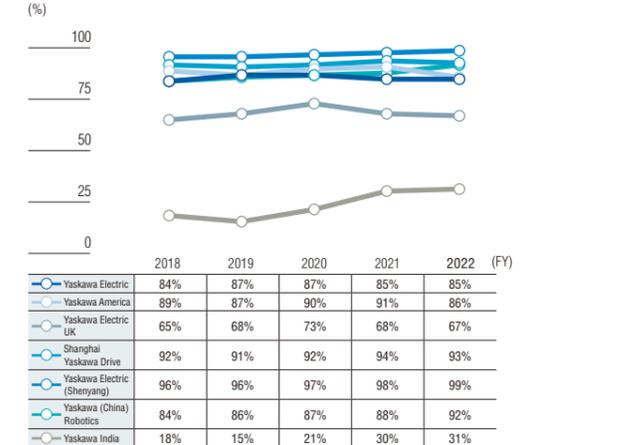
The amount of interest-bearing debt at the end of FY2022 was 99.6 billion yen, an increase of 31.6 billion yen from the end of the previous fiscal year. The net D/E ratio was 0.16 times, 0.12 points worse than the end of the previous fiscal year. Current liabilities increased compared to the end of the previous fiscal year due to an increase in short-term borrowings and other current liabilities.

**Frequency rate of lost-time injuries**



In FY2022, the frequency rate of lost-time injuries was 0.00 for Yaskawa Electric, 0.12 for the Yaskawa Group in Japan, and 0.22 for the Yaskawa Group overseas. All three figures improved from the previous year. These figures meet the targets for FY2025, keeping the figures for Yaskawa Electric below 0.2 and for the Yaskawa Group in Japan and overseas below 0.4.

**Local procurement rate at key business sites**



In FY2022, there was no significant change in the local procurement rate at key business sites from the previous year.

## Business Performance of FY2022

### FY2022 Management Review (Quantitative)

- Revenue and operating profit each **set new record highs**.
- The dividend payout ratio remained at 30.0%+a. Due to the growth in profit attributable to owners of the parent, the annual dividend **reached a new record high**.

	FY2022 targets <sup>*1</sup>	Previous mid-term business plan "Challenge 25 Plus" (FY2019 to FY2022 <sup>*2</sup> ) targets	FY2022 results
<b>Revenue</b>	550.0 billion JPY	470.0 billion JPY	<b>556.0 billion JPY</b> <span>Record high</span>
<b>Operating profit</b>	70.0 billion JPY	61.0 billion JPY	<b>68.3 billion JPY</b> <span>Record high</span>
<b>Operating profit ratio</b>	12.7%	13.0%	<b>12.3%</b> <span>Record high</span>
<b>ROE</b>		15.0% or more	<b>16.2%</b>
<b>ROIC</b>		15.0% or more	<b>14.6%</b>
<b>Dividend payout ratio</b>		30.0%+a	<b>32.3%</b>

**Achieved the previous mid-term targets for the four items**

<sup>\*1</sup> As of announcement of financial results for the second quarter of FY2022  
<sup>\*2</sup> Revised in April 2021

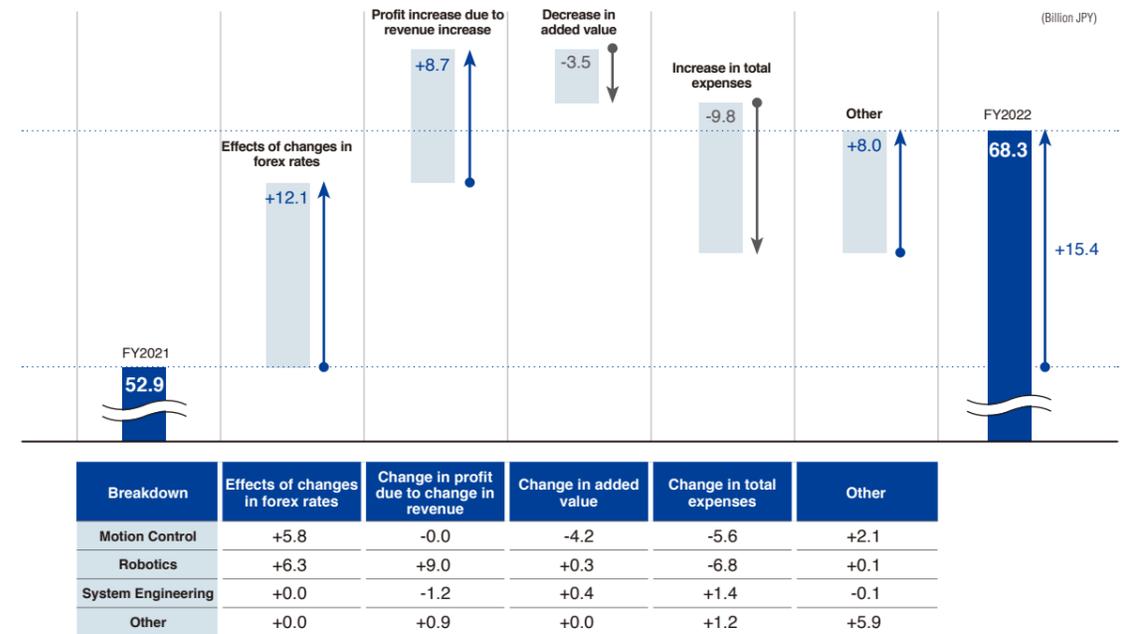
### FY2022 Management Review (Qualitative)

Category	Key Initiatives
<b>Production</b>	<ul style="list-style-type: none"> <li>Launched YASKAWA (Changzhou) Mechatronics system Co., Ltd. (in China), and started construction of machining plant for robot parts (in Japan) to improve the in-house production rate</li> <li>Enhanced inventory management at EMS and global production sites (real time visualization)</li> </ul>
<b>Sales</b>	<ul style="list-style-type: none"> <li>Launched "MOTOMAN-Craft" to enable easy robotization of skilled work that has been difficult to program</li> <li>Exhibited a sample of the latest robot that is applicable to the new back-end process accompanying the evolution of semiconductor packaging at "SEMICON Japan 2022," an international exhibition</li> <li>Strengthened sales by enhancing application packages (palletizing, etc.) of collaborative robots</li> <li>Promoted price pass through to cover rising prices of raw materials and parts</li> </ul>
<b>Development</b>	<ul style="list-style-type: none"> <li>Strengthened development process in view of production, sales, and services through rebuilding PLM<sup>*1</sup> in YDX II<sup>*2</sup></li> <li>Created synergies and accelerated development of new products through a cross divisional development system</li> <li>Developed to switch to alternative parts for bottleneck parts in collaboration with production department</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>Accelerated the construction of a product lifecycle management platform that offers value to customers (YDX-II)</li> <li>Revised reduction targets for Scope 1 + 2<sup>*3</sup> to higher ones and added a new reduction target for Scope 3<sup>*4</sup> to achieve carbon neutrality by 2050</li> <li>Greenhouse gas reduction targets have been certified as 1.5 °C targets by the SBTi<sup>*5</sup></li> <li>Implemented position specific training programs to deepen understanding of the Yaskawa Principles</li> <li>Started application of new compensation system based on the role each person plays and the size of the duties</li> </ul>

<sup>\*1</sup> Product Lifecycle Management  
<sup>\*2</sup> Abbreviation form for YASKAWA Digital Transformation. Activities to visualize and centralize management resources and to allocate them optimally were carried out in YDX I. In YDX-II we aim to achieve overall optimization through data linkage based on PLM reconstruction.  
<sup>\*3</sup> Scope 1 Emissions associated with fuel use (direct emissions), Scope 2: Emissions associated with the use of purchased electricity and heat (indirect emissions by electric power companies, etc.).  
<sup>\*4</sup> Indirect emissions except for Scope 1 and 2. (emissions by other companies related to own business activities)  
<sup>\*5</sup> International initiative to certify corporates' CO<sub>2</sub> reduction targets as consistent with scientific evidence

### Breakdown of Changes in Operating Profit (FY2021→FY2022)

- Operating profit increased year on year** due to the impact of the depreciation of the yen, as well as increased revenue mainly of robots, changes in retirement pension plans and other revenues from the sale of idle real estate.
- Value added decreased** due to the impact of high raw material and logistics costs, although profitability was improved through price shifting of products.
- Overhead costs increased** due to inflation.



### FY2023 Plan

As for the business environment surrounding Yaskawa Group during the FY2023, although the semiconductor market remains sluggish, capital investments for automation and labor-saving in overall manufacturing are expected to continue. We expect the revenue to grow by steadily filling order backlogs and by accurately capturing the continuing demand.

FY2023 is the first year of "Realize 25", the last mid-term business plan in "Vision 2025". We will deploy the transformation that we have made in "Challenge 25 Plus" globally, further enhance the effectiveness of our solution concept, i<sup>3</sup>-Mechatronics, and maximize added value through YDX (Yaskawa Digital Transformation) in an effort to respond flexibly and speedily to market changes, which result in further improvement of profitability.

#### Key Implementation Items

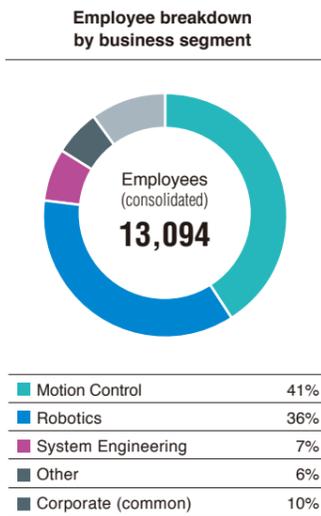
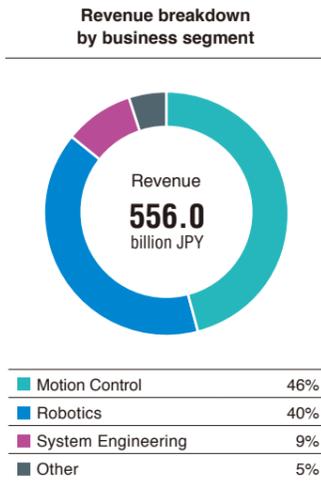
<b>Increase added value</b>	<ul style="list-style-type: none"> <li>Continue to evolve our technology, production, sales, quality control and service centering on i<sup>3</sup>-Mechatronics solutions to provide highly effective solutions to our customers</li> </ul>
<b>Expand business</b>	<ul style="list-style-type: none"> <li>In order to capture markets expected to grow substantially such as EV, lithium-ion battery and semiconductor industries, and growing markets such as food and agriculture, where automation is expected to accelerate in the future, we will strengthen cross-divisional sales activities from market perspective.</li> <li>By launching strategic new products, we will enhance our competitiveness and ensure that we capture global demand, which lead to earnings expansion.</li> </ul>
<b>Maximize earnings</b>	<ul style="list-style-type: none"> <li>Strengthen materials procurement functions by centralizing procurement of semiconductor and other key components at the headquarters</li> <li>Expand in-house manufacturing of machined parts for robots</li> <li>Increase production capacity and the rate of production automation, strengthen our ability to respond to demand fluctuations, and accelerate filling order backlog</li> <li>Achieve further earnings growth through price pass-through in response to the impact of soaring materials and labor costs</li> </ul>
<b>Strengthen management foundation</b>	<ul style="list-style-type: none"> <li>Work to build a robust supply chain by strengthening data linkage from product development to product quality and market quality (YDX-II)</li> <li>Expand the educational programs of Yaskawa Principles</li> </ul>

# At a Glance

The Yaskawa Group deploys the technology and knowhow of the highest global standards to its products and services through business activities in the three core business segments of Motion Control, Robotics and System Engineering.

**FY2022**

Revenue	<b>556.0</b> billion JPY
Operating profit	<b>68.3</b> billion JPY
Operating profit ratio	<b>12.3%</b>



## Motion Control

### AC servo & controller business

Enhancing machine performance and productivity as major components incorporated in production equipment



AC servo drive Z-X series

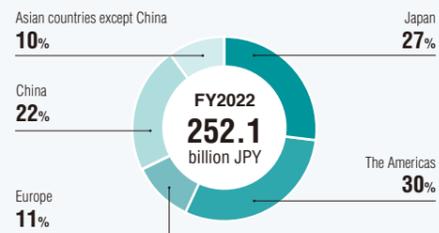
### Drives business

Contributing to sustainable development of society and industry by realizing energy-saving and higher performance of machinery through optimum motor control

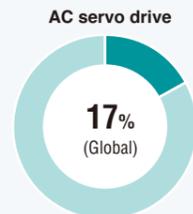


Yaskawa AC drive series Matrix converter U1000 Flat-type eco PM motor

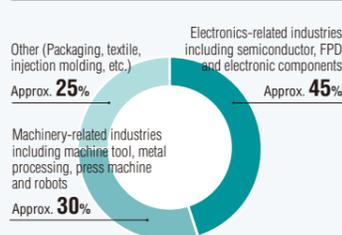
**Breakdown of FY2022 revenue by region**



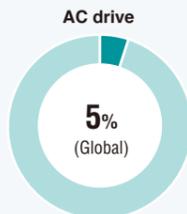
**Market share (company estimate)**



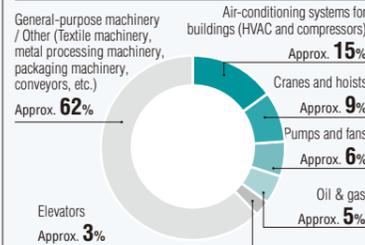
**Business breakdown by application (FY2022 results)**



**Market share (company estimate)**



**Business breakdown by application (FY2022 results)**



## Robotics

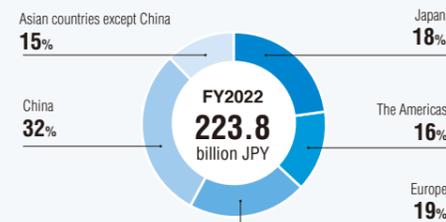
Responding to the growing need for labor-saving and automation at production sites, we are taking on the challenge of realizing a new industrial automation revolution

- Arc welding robots
- Spot welding robots
- Painting robots
- Handling robots
- Clean/vacuum transfer robots for semiconductor and LCD manufacturing equipment

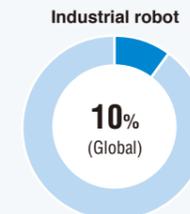


For food processing application MOTOMAN-GP8 Arc-welding robot MOTOMAN-AR1730 Collaborative robot MOTOMAN-HC20DT

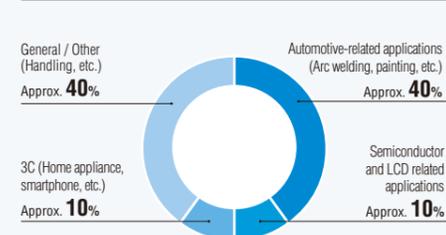
**Breakdown of FY2022 revenue by region**



**Market share (company estimate)**



**Business breakdown by application (FY2022 results)**



## System Engineering

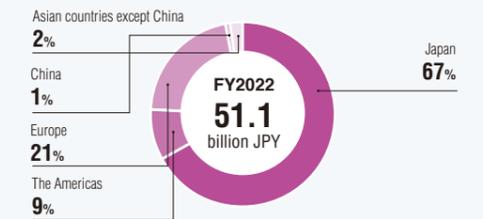
Supporting prosperous life and society through technologies and proven performance accumulated over a century

- Industrial automation drive business
- Environment & energy business
- Social system business

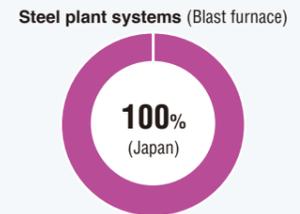


Electrical system for steel plant Electrical instrumentation systems for water and sewerage PV inverter

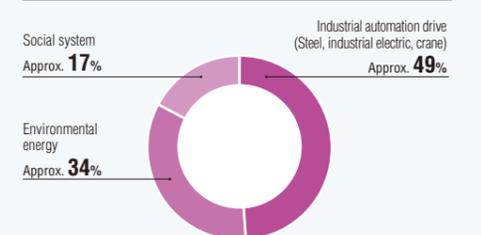
**Breakdown of FY2022 revenue by region**



**Market share (company estimate)**



**Business breakdown by application (FY2022 results)**



# Motion Control

## AC Servo & Controller Business



**Kenji Ueyama**  
Senior Executive Officer  
General Manager,  
Motion Control Div.

### AC servo drive's role in manufacturing digital transformation

In the manufacturing industry, it is important to collect, analyze and utilize various data obtained from equipment in order to improve productivity. AC servo & controller is a key component that is built into and drive a variety of equipment used in manufacturing. By making AC servo drive, which controls the movement of equipment (motion), function as a sensor and acquire various data from the equipment, it is possible to provide new added value to manufacturing, such as preventive maintenance of equipment and improvement of production quality.

Yaskawa provides solutions to customers based on the concept of "i<sup>3</sup>-Mechatronics," which "realizes a new industrial automation revolution" by data utilization to improve productivity. In 2021, we released the new AC servo drive Σ-X series and the new controller YRM-X series as key products to realize this concept. By using the sensing function of Σ-X, we can collect operation data of the equipment without installing special sensors. In addition, we are enhancing the added value of customer equipment by expanding the scope of solutions through data-driven control of YRM-X.

#### Overview of FY2022 performance

- High demand for semiconductors and electronic components mainly in the first half of the year in Japan and the United States
- Continued revenue growth due to favorable demand environment caused by normalization from the COVID-19 pandemic
- Profit was pressured by the difficulty in procurement and surging materials costs

#### SWOT analysis of business

##### Strengths: Strengths of Our Business and Differentiation

- Developed the world's first "minertia motor" which is the prototype of the current servo motor in 1958
  - ▣ World-class performance and quality
  - ▣ Brand value as global No.1 market share
- Hold strong relationships of trust with leading companies in various manufacturing equipment
  - ▣ Contributing to the advancement and performance of machines through the pursuit of leading-edge technologies
- Practice of i<sup>3</sup>-Mechatronics
  - ▣ Realization of new automation revolution

##### Weaknesses: Challenges

- Reinforcement of response to rapid changes in demand in production

##### Opportunities: Business Opportunities

- Enhancement of the added value of manufacturing equipment
- Large-scale investment in the semiconductor industry in various countries
- Acceleration of the adoption of EVs

##### Threats: Business Risks

- Supply chain dysfunction due to geopolitical risks
- Rise of emerging market competitors

#### Future initiatives based on SWOT analysis results

- Demonstration and construction of "i<sup>3</sup>-Mechatronics" solution 
- Expanding the lineup of Σ-X series and YRM controllers to realize "i<sup>3</sup>-Mechatronics" 
- Accelerating global expansion of production methods of YASKAWA Solution Factory (hereafter Y'sF) and expanding production models in demand areas 

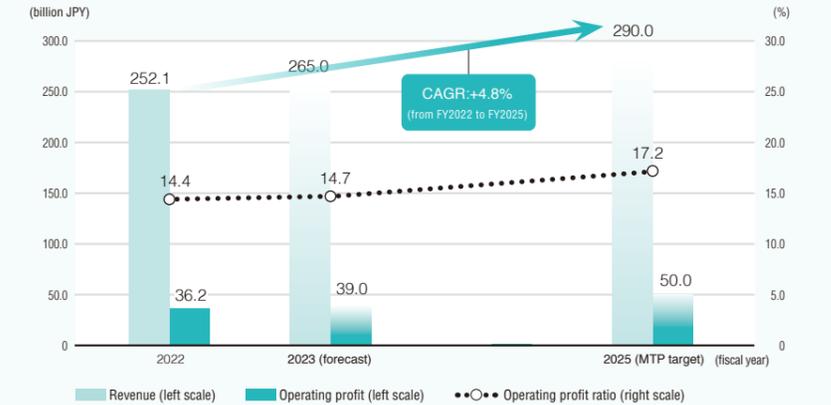
### Goals of mid-term business plan "Realize 25"

Accelerate the global expansion of "i<sup>3</sup>-Mechatronics" through the realization of Yaskawa Total Solutions, and aim to maximize profits by pursuing production efficiency and building a high-profit structure by strengthening manufacturing

#### Market size and CAGR (from 2022 to 2025)

	FY2022	FY2025
Market size	Approx. 0.8 tn. JPY	Approx. 0.9 tn. JPY
CAGR	4.0%	

#### Trends in performance, forecast and target of mid-term plan (Motion Control segment)



#### "Realize 25" market outlook

<b>Semiconductor</b>	<ul style="list-style-type: none"> <li>• Large-scale investment plans continue globally, in Europe, the U.S., South Korea and Japan</li> <li>• Potential demand for IoT and other services is firm and expected to recover from the second half of FY23</li> </ul>
<b>Electronic components</b>	<ul style="list-style-type: none"> <li>• Smartphone demand remains weak, but in-vehicle and solar-related applications remain strong</li> <li>• Potential demand for IT related products remains strong, and demand is expected to grow steadily</li> </ul>
<b>Battery</b>	<ul style="list-style-type: none"> <li>• Market expansion is expected to continue as EVs are adopted globally to reduce environmental impact</li> <li>• Use in other industries is expected to further expand the market</li> </ul>
<b>Machine tool</b>	<ul style="list-style-type: none"> <li>• The automobile industry transition due to the adoption of EVs cause demand to increase in new markets and fields</li> <li>• Expansion of processing applications caused by the recovery of the Chinese domestic demand</li> </ul>

#### FY2022 results and future initiatives

	FY2022 results	FY2023 initiatives	FY2025 goals
<b>Development</b>	<ul style="list-style-type: none"> <li>• Launched Σ-X series and YRM controller to expand components for "i<sup>3</sup>-Mechatronics"</li> </ul>	<ul style="list-style-type: none"> <li>• Expand lineup of Σ-X series and YRM controllers</li> </ul>	<ul style="list-style-type: none"> <li>• Expand solution coverage by expanding lineup of Σ-X series YRM controllers</li> </ul>
<b>Production</b>	<ul style="list-style-type: none"> <li>• Y'sF production system which achieved 50% increase in production efficiency was introduced to plants in China (Shenyang)</li> </ul>	<ul style="list-style-type: none"> <li>• Accelerating global development of Y'sF production system and expanding production models in demand areas</li> </ul>	<ul style="list-style-type: none"> <li>• Improve production efficiency by using Yaskawa products and expand local production</li> </ul>
<b>Sales</b>	<ul style="list-style-type: none"> <li>• Introduced new products to global growth markets (semiconductors, 3C*, new infrastructure, etc.) especially in China and Asia to increase orders</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrating and building "i<sup>3</sup>-Mechatronics" solutions based on new products through collaboration with customers</li> </ul>	<ul style="list-style-type: none"> <li>• Accelerate approach to growth markets by providing "i<sup>3</sup>-Mechatronics" solutions</li> </ul>

\* 3C: Abbreviation for consumer and digital communication devices (three acronyms for Computer, Communication, and Consumer Electronics)

Topics

**Launch of FT55 and FT56 specifications with data customization added to the AC servo drive Σ-X series**

The AC servo drive Σ-X series, which was commercialized in 2021 based on the concept of “accelerating evolution through Motion×Digital Data Solutions,” has been increasing optimal functions to standard servo packs according to customers’ devices and applications. On January 30, 2023, the Σ-X series FT55 and FT56 specifications, which are equipped with functions to customize sensing data, became available for feedback to motion control in addition to sensing data collection and primary analysis.

The Σ-X series is a product lineup that uses sensing data to implement our company solution concept “i<sup>3</sup>-Mechatronics” and their sales are steadily increasing. By using the know-how we have accumulated over many years of using AC servo drives, we will accelerate the materialization of “i<sup>3</sup>-Mechatronics” and improve the added value of our customers’ devices by increasing the number of models of the Σ-X series equipped with optimal functions for each application.



AC servo drive Σ-X series FT55/FT56 specifications

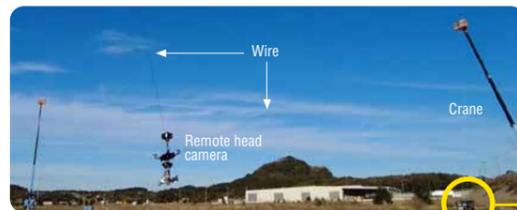
Example of customer introduction

**Remote shooting system utilizing servo motor**

Our company develops, designs, manufactures and sells special equipment and systems for shooting live concerts and broadcast-ing sports. When we were working on the development of the world’s best remote-controlled camera, we decided to introduce Yaskawa’s servo motor to take advantage of their characteristics, which enables accurate control from high speed to very low speed. Although the noise (magnetic resonance) emitted by the motor was a major issue, we succeeded in developing the world’s first remote imaging system using servo motors in 2006 through trial and error with Yaskawa engineers. The ability to shoot smoothly while moving by remote control has been recognized by people in the industry and artists.



Masahiko Hashimoto  
TECHNICAL CENTER MANAGER  
SIS CO., LTD.



Servomotors used for wire hoisting machine

# Motion Control

## Drives Business



Tatsuya Yamada  
Senior Executive Officer  
General Manager,  
Drives Div.  
General Manager,  
Environmental Energy  
Business

### AC drive’s role in society and industry

AC drives can continuously change the motor’s rotational speed by converting the voltage and frequency of the power supply. The use of AC drive not only enables advanced motor control, but also contributes to energy saving by operating as much as necessary. AC drive is widely applied to machinery and equipment in which motors are used, and the global market is estimated to reach 1.8 trillion yen. In the past, AC drive’s growth drivers

were (1) the advance of electrification in line with industrial sophistication, and (2) the rise of emerging economies. In recent years, however, the energy-saving effects of using AC drives have attracted renewed attention as part of efforts to achieve carbon neutrality in countries around the world. AC drive is increasing its presence as an indispensable device for the sustainable development of society and industry.

#### Overview of FY2022 performance

- Accelerating energy conservation investment with a global focus on decarbonization (carbon neutrality)
- Significant increase in oil and gas-related demand in the United States
- Increased backlog of orders as production fails to keep pace with high levels of demand due to difficulties in procurement

### SWOT analysis of business

#### Strengths: Strengths of Our Business and Differentiation

- Power electronics technology and high-efficiency motor technology
- Control and sensing technologies based on motor drives developed over many years
- Knowledge of how machines and facilities are used (applications) based on system engineering
- Worldwide sales and service bases, development centers, and production plants

#### Weaknesses: Challenges

- Creating added value for customer machines
- Improvement of development speed including new technologies
- Improvement in cost competitiveness
- In-house production of main parts
- Reducing the impact of global shortages of material

#### Opportunities: Business Opportunities

- Expansion of energy conservation promotion policies in each country based on the sustainability codes (SDGs, carbon neutral, etc.)
- Accelerate factory automation including 5G and IoT
- Enhancing the performance of industrial equipment through AI, etc.
- Rise of market in emerging countries
- Enhancement of high-efficiency motor regulations

#### Threats: Business Risks

- Geopolitical risks in Russia and China
- Movement toward in-house production by some customers
- High dependence on specific markets such as oil and gas markets
- Rise of emerging market competitors

### Future initiatives based on SWOT analysis results

- Accelerate deployment of high-value-added products and solutions for emerging economies, particularly in Southeast Asia
- Enhance QCD (Quality, Cost, Delivery) of technologies and products by fully utilizing the functions of YASKAWA Technology Center
- Realization of BCP through review of component, substrate, and product supply systems and expansion of in-house production of parts
- Increase the revenue ratio of stable growth markets (HVAC\*, elevators, etc.) by capturing energy conservation demand

\* Heating, Ventilation and Air Conditioning

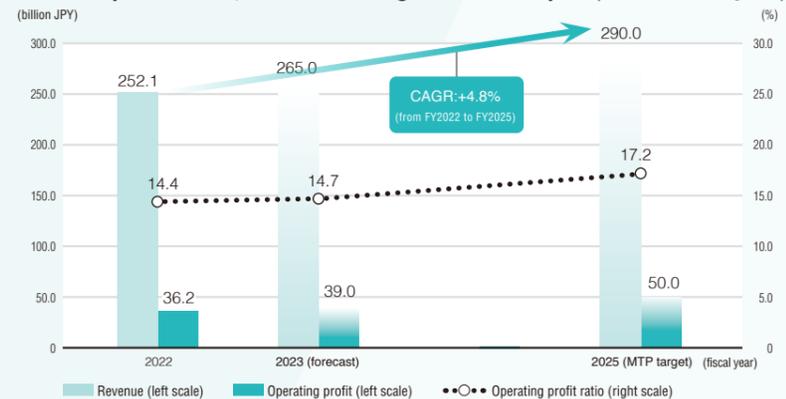
### Goals of mid-term business plan “Realize 25”

“Evolution of global business” and “business growth in line with carbon neutrality”

#### Market size and CAGR (from 2022 to 2025)

	FY2022	FY2025
Market size	Approx. 1.8 tn. JPY	Approx. 2.1 tn. JPY
CAGR	+4.7%	

#### Trends in performance, forecast and target of mid-term plan (Motion Control segment)



#### FY2022 results and future initiatives

	FY2022 results	FY2023 initiatives	FY2025 goals
<b>Development</b>	<ul style="list-style-type: none"> <li>Accelerate replacement of tight-supply parts</li> </ul>	<ul style="list-style-type: none"> <li>Enhancement of product lineup of Yaskawa AC drive series</li> </ul>	<ul style="list-style-type: none"> <li>Completion of product lineup of Yaskawa AC drive series</li> <li>Development of flagship devices to create customer value</li> </ul>
<b>Production</b>	<ul style="list-style-type: none"> <li>Improve global production capability</li> <li>Expand in-house production</li> </ul>	<ul style="list-style-type: none"> <li>Eliminate backlogs by maximizing production</li> <li>Expand in-house production</li> </ul>	<ul style="list-style-type: none"> <li>Expand demand area production</li> <li>Expand in-house production</li> </ul>
<b>Sales</b>	<ul style="list-style-type: none"> <li>Penetration of new series products in the global market</li> <li>Capture demand for decarbonization by combining with flat type Eco PM motor</li> <li>Accelerate switching to new products</li> </ul>	<ul style="list-style-type: none"> <li>Increase revenues in global focus segments (US HVAC market, Chinese semiconductor/rechargeable battery market)</li> <li>Capture energy conservation demand through carbon neutral proposals</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen customer responsiveness in global scale</li> <li>Expand sales opportunities for green products by accelerating energy conservation proposals</li> </ul>

#### Example of customer introduction

##### Food processing machine utilizing AC drives

Our company manufactures and sells food processing machines that automatically make rice balls and serve rice in bento boxes. To dish up bento boxes, it is necessary to fine-tune the speed of the rollers and the torque at the time of molding, depending on the variety of rice, the water content, and the hardness and viscosity of the rice, which vary depending on the climate. The Yaskawa AC drives can perform this adjustment independently, thereby reducing the number of parts and contributing to the reduction of equipment failures. In addition, food processing machines can cause inconvenience to customers if they stop. We appreciate the fact that the motor can be rotated to the limit of performance despite variations in food conditions, and we use drives manufactured by Yaskawa, for almost 100% of our noodle making machines.



(from left)  
**Tatsuya Yoshida**  
 Head office Sales Dept. (Technical sales),  
 Fujiseiki Co., Ltd  
**Masashi Ono**  
 Assistant Manager, Development & Design  
 Dept. (Production Development office),  
 Fujiseiki Co., Ltd

# Robotics



**Manabu Okahisa**  
 Senior Executive Officer  
 Regional Manager, China  
 General Manager, Robotics Div.  
 Department Manager, Business  
 Planning Dept., Robotics Div.

### Role of robots in manufacturing

Industrial robots are used to automate welding, painting, assembly and transportation in various fields, including the automotive market. In recent years, against the backdrop of global labor shortages, demand has been increasing in general industrial fields such as the food, medical, pharmaceuticals, and 3C (computers, consumer electronics and communications equipment.)  
 Going forward, the demand for automation of the manufacturing sites is expected to grow in response to

the sophistication of manufacturing, such as data utilization and variable-mix variable-volume production. In this context, Yaskawa will contribute to further automation and optimization at manufacturing sites by providing solutions based on the “i<sup>3</sup>-Mechatronics” concept, and will contribute to creating value for customers by providing new automation solutions in areas where robots have traditionally been difficult to apply.

#### Overview of FY2022 performance

- Adoption of EVs accelerated in the global automotive market and expansion of battery-related capital investment continued.
- Increased labor costs and labor shortages in general industries, including logistics, food, and industrial machinery, accelerated investment aimed at upgrading and automating production.
- Revenue and profits greatly increased as a result of improving production efficiency through in-house manufacturing of parts and other measures to accurately capture the expansion of overall market demand.

### SWOT analysis of business

<p><b>Strengths: Strengths of Our Business and Differentiation</b></p> <ul style="list-style-type: none"> <li>• Improved performance and evolving solutions through in-house production of motion control products (servo motors, drives, and controllers) that are the most important for robot performance</li> <li>• Providing the cross-divisional solution based on the i<sup>3</sup>-Mechatronics concept</li> <li>• Cross-business development system utilizing YASKAWA Technology Center</li> <li>• Global sales, production and service bases</li> </ul>	<p><b>Weaknesses: Challenges</b></p> <ul style="list-style-type: none"> <li>• Strengthening adaptability to rapid changes in demand in production</li> </ul>
<p><b>Opportunities: Business Opportunities</b></p> <ul style="list-style-type: none"> <li>• Expansion of automation needs in a wide range of fields</li> <li>• Manufacturing innovation in the automotive industry (including the adoption of EVs and eco-friendly system)</li> <li>• Advances in robot-related technologies</li> </ul>	<p><b>Threats: Business Risks</b></p> <ul style="list-style-type: none"> <li>• Global shortage of materials and rising material costs</li> <li>• Decline in demand for capital investment due to geopolitical risks</li> <li>• Rise of emerging manufacturers</li> </ul>

#### Future initiatives based on SWOT analysis results

- Further evolution of the production system which is flexible to the volume fluctuations realized at the mother plant, and its expansion to overseas production bases
- Corporate-wide enhancement of supply chain strategy and expansion of in-house production
- Proposing high-value-added Yaskawa solutions based on the i<sup>3</sup>-Mechatronics concept

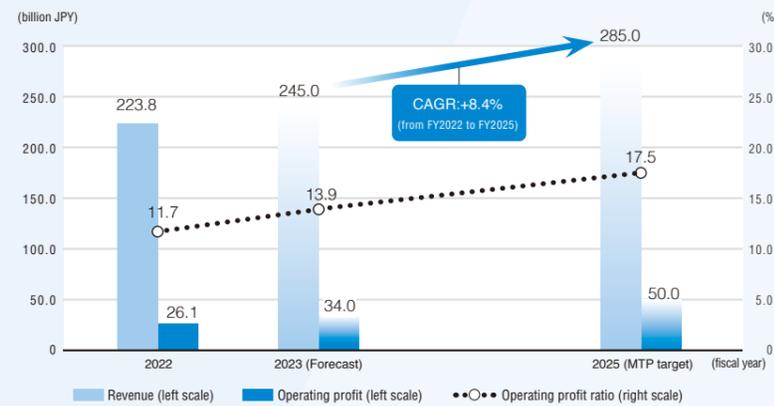
## Goals of mid-term business plan “Realize 25”

Work to expand the field of automation that will contribute to a sustainable society through the actual deployment of “i-Mechatronics” solutions, and strengthen business execution capabilities by accelerating its internal implementation and realize the world's top profit structure

### Market size and CAGR (from 2022 to 2025)

	FY2022	FY2025
Market size	Approx. 1.4 tn. JPY	Approx. 1.8 tn. JPY
CAGR	+7%	

### Trends in performance, forecast and target of mid-term plan



### “Realize 25” market outlook

<b>Automobile</b>	Driven by investment in EV-related businesses, steady growth in capital investment is expected
<b>Semiconductor</b>	Although market trends may fluctuate in the short term, stable growth is expected in the mid-to-long term
<b>General industries</b>	Investment continues in growth areas such as solar/ battery. Also, automation needs expands in a wide range of areas (industrial machinery, construction machinery) against the backdrop of global labor shortages.

### FY2022 results and future initiatives

	FY2022 results	FY2023 initiatives	FY2025 goals
<b>Development</b>	<ul style="list-style-type: none"> <li>Development of MOTOMAN NEXT, a new type of autonomous robot</li> </ul>	<ul style="list-style-type: none"> <li>Launch of MOTOMAN NEXT and expansion of partners</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of MOTOMAN NEXT lineup and development of business channels</li> </ul>
<b>Production</b>	<ul style="list-style-type: none"> <li>Expansion of automation and labor saving areas at the mother plant</li> </ul>	<ul style="list-style-type: none"> <li>Launch of new machining plant to improve internal manufacturing rate</li> <li>Global expansion of mother plant initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Construction of integrated production system from parts to assembly as a mother factory</li> <li>Strengthen global production</li> </ul>
<b>Sales</b>	<ul style="list-style-type: none"> <li>Unlocked potential demand in the collaborative robots, EV and semiconductor markets, and proposed solutions</li> </ul>	<ul style="list-style-type: none"> <li>Increase orders through providing accurate solutions to collaborative robot, EV and semiconductor markets</li> </ul>	<ul style="list-style-type: none"> <li>Expand the automation fields by expanding solutions for collaborative robots, EV, and semiconductor markets</li> </ul>

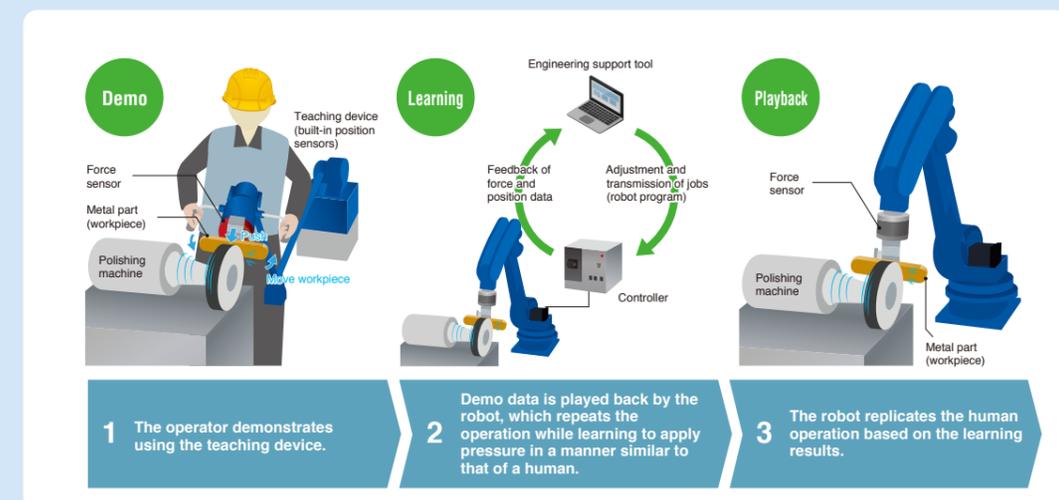
## Topics

### Launch of MOTOMAN-Craft that enables demonstration teaching of the robot movements

On November 15, 2022, MOTOMAN-Craft, a demonstration teaching package that enables direct teaching of human movement (demonstration) in order to roboticize the work process of subtle force adjustments and complex movements that require skill. This makes it possible to easily roboticize skilled work that is difficult to quantify and program.

For example, in the field supported by workers with high skills, such as polishing resin and metal surfaces, the skilled workers are aging, and the shortage of successors is increasing the amount of time and money spent on skills transfer and human resource development.

In addition, smooth force adjustment and skillful movements are required in these field operations, making it difficult to quantify and program techniques, and thus making it difficult to teach and utilize robots. Against this background, we developed a package that can teach human movement directly to robots, which is completely different from the previous teaching methods.



### Example of customer introduction

#### Automation of manhole manufacturing process using robots

We manufacture and sell lifeline-related cast iron products such as manhole covers for water supply and sewage. When we were considering automating deburring operations\*1 in order to solve labor shortages, we decided to introduce Yaskawa robots, which are capable of automating small quantity, high variety of production, which is our strength. After many discussions with the person from Yaskawa about “how to realize automation of a large variety of products” and “how to make the robot handle heavy frames\*2 to get them shaved accurately,” we realized the automation of deburring operations in 2021. We are also aiming to further improve productivity by using Yaskawa robots in the line for casting consumer products currently under construction.



**Isao Etoh**  
Executive Officer & General Manager  
Saga Plant  
HINODE, Ltd.

\*1 Scraping of unnecessary protrusions generated during metal processing  
\*2 A frame for covering manhole covers

# System Engineering



**Tatsuya Yamada**  
Senior Executive Officer  
General Manager,  
Drives Div.  
General Manager,  
Environmental Energy  
Business



**Jiro Nakagawa**  
President & CEO  
Yaskawa Automation &  
Drives Corp.

## Overview of System Engineering business

The System Engineering segment consists of the environmental energy business of Yaskawa Electric Corporation and the industrial automation drive business of Yaskawa Automation & Drives Corporation\*. In the environmental energy business, we are contributing to the expansion of the use of renewable energy through products such as PV inverter for solar power generation and generators for large-scale wind power generation. In the industrial automation drive business, we have developed system

engineering technologies and electrical products that we have cultivated over many years. This contributes to the high productivity and stable operation of water treatment plants, large crane control, and industrial plants (textile, paper, film lines, etc.).

We provide total solutions with advanced system technologies and high-quality products, and contribute to building reliable social and industrial systems, comfortable lifestyles, and a sustainable society.

### Overview of FY2022 performance

- Revenue from steel plants, water and sewage systems stagnated.
- Revenue from PV inverter for solar power generation grew.
- While revenue decreased year-on-year, profits increased due to efficient business management and strict cost control.

## SWOT analysis of business

### Strengths: Strengths of Our Business and Differentiation

- Power conversion technology and automation/remote technology for energy saving and high efficiency
- Ability to respond to diversified needs such as solar and large-scale wind power generation
- Achievements in the field of electric systems for water supply and sewage and system technology development capabilities
- 100% domestic share of systems for blast furnaces in steel plants
- Share higher than 50% in port crane market in Japan, China and Southeast Asia
- Top-class share in Japan in the industrial electric business including film, textiles, and paper machinery

### Weaknesses: Challenges

- Improvement in cost competitiveness
- Improvement in product development speed
- Creating business synergies by integrating systems businesses
- Building optimal overseas systems for growth areas (Secondary battery and crane)

### Opportunities: Business Opportunities

- Accelerated efforts to achieve carbon neutrality
- The market for wind power generation grows over the medium to long term, particularly for offshore wind power.
- Increasing demand for electrification of large ships
- Need for labor-saving and high-efficiency electricity systems for water and sewage systems using IoT, AI and robots
- Increasing demand for lithium-ion battery production facilities
- Full automation and remote operation of port cranes

### Threats: Business Risks

- Oligopolization of wind turbine manufacturers and their in-house production
- Modification of renewable energy systems and grid interconnection regulations
- Concerns over project delays and cancellations due to rising prices of materials and procurement difficulties in building equipment and facilities
- Intensifying cost competition
- Decline in infrastructure investment in Japan

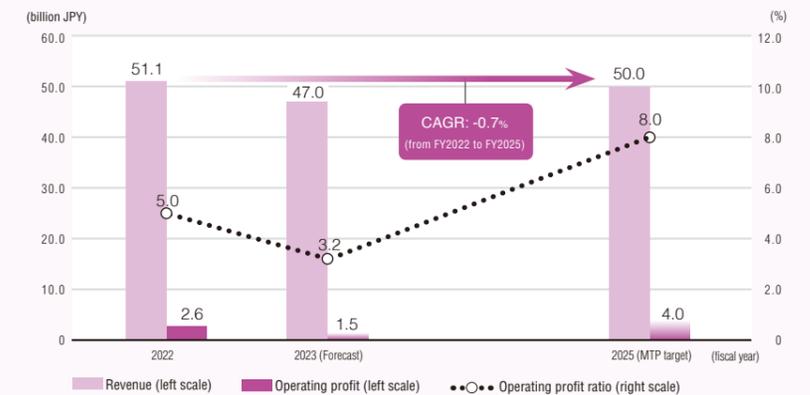
## Future initiatives based on SWOT analysis results

- Improvement of profitability through optimization of procurement, production structure and cost structure and introduction of new products
- Improvement of technological capabilities and development speed utilizing YASKAWA Technology Center
- Expansion of market and customer base and development of new business
- System response to customer manufacturing processes to achieve carbon neutrality in the steel market
- Strengthening our business structure toward secondary battery manufacturers in China and Japanese companies in the growing materials market
- Capturing large-scale investment projects in port cranes in Southeast and South Asia
- Securing profits by building efficient production systems and in-house production of high-value-added products (Drive panel for cranes and motor)

## Goals of mid-term business plan "Realize 25"

Achieve stable profitability in the environmental energy business. In the steel, social systems, cranes, and industrial electric (paper, film, etc.) business, maximize added value and generate stable profits by pursuing engineering technologies to solve production issues and collaborating with customers to create system solutions to realize production innovation.

### Trends in performance, forecast and target of mid-term plan



## FY2022 results and future initiatives

	FY2022 results	FY2023 initiatives	FY2025 goals
<b>Development</b>	<ul style="list-style-type: none"> <li>• Completion of development of new PV inverter</li> <li>• Started development of the next integrated controller</li> <li>• Completion of development and market launch of a drive panel for cranes</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation of the integrated controller prototype</li> <li>• Market launch of standard drive panels for steel market</li> </ul>	<ul style="list-style-type: none"> <li>• Complete lineup of new PV inverter Enewell-SOL P3A models</li> <li>• Complete development of integrated controller STEP1</li> <li>• Complete verification of vision system for cranes at domestic ports</li> </ul>
<b>Production</b>	<ul style="list-style-type: none"> <li>• Started planning to optimize procurement and strengthen production systems</li> <li>• Expansion of in-house production of drive panels for industrial uses and cranes, and motors</li> </ul>	<ul style="list-style-type: none"> <li>• Design and manufacturing CAD automatic design and modularization</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of design and manufacturing database for efficient production of drive panels</li> </ul>
<b>Sales</b>	<ul style="list-style-type: none"> <li>• Increased share in growth markets (self-consumption markets) with new products</li> <li>• Expanded sales of carbon neutral systems in the steel market</li> <li>• Accelerated sales expansion into globally growing markets such as harbor cranes and secondary batteries</li> </ul>	<ul style="list-style-type: none"> <li>• Expanding sales of the new PV inverter Enewell-SOL P3A for the self-consumption market</li> <li>• Co-creation of hydrogen heating and blowing technology with customers</li> <li>• Completion of crane automation project</li> </ul>	<ul style="list-style-type: none"> <li>• Acquisition of project by actual application of hydrogen blast furnace</li> <li>• Acquisition of orders for Asian automated port cranes</li> </ul>

**Basic approach to strengthening intellectual capital**

The intellectual capital of the Yaskawa Group consists of technology and intellectual property, which are sources of products and services. In terms of technology, in order to create solutions that solve customers' management problems, we will continue our efforts to develop the world's first and the world's best products and technologies, while creating customer value through a wide range of initiatives such as combining them, strengthening our support for digital data solutions, and expanding collaboration with universities and other companies.

In terms of intellectual property, we will promote our intellectual property strategy in conjunction with our business plan and technology strategy, and support business development through the prevention of intellectual property disputes, the accurate protection of our own technologies, and the prompt handling of technology contracts in accordance with business characteristics.

**Integration of technology at YASKAWA Technology Center**

In FY2021, in order to further strengthen our ability to respond to changing market needs, we began full-scale operation of YASKAWA Technology Center (YTC), the core technology development site for the global Yaskawa Group.

By consolidating the development systems and headquarters development divisions that had been dispersed by business division, we have created an environment in which we can consistently engage in planning, development, production, and quality control. As a result, engineers in each division and headquarters development division can share information and interact in the same office, thereby stimulating communication.

By utilizing YASKAWA Digital Transformation (YDX) to establish a system for sharing and linking data on development, production, sales, and quality, we aim to provide products and services in a timely manner that realize the "improvement and evolution" demanded by our customers.



A meeting at YTC

**Creation of synergies through technology integration**

At YTC, we organize review committees for development design and evaluation tests, as well as technical exchange meetings between internal and external engineers, to create an environment where engineers from different technical fields can participate.

We also conduct cross-functional activities and organizes teams of engineers from each technical field to strengthen technology development and product development. In these activities, we also prepare a technology roadmap that anticipates future social conditions and market requirements.

In addition to development and design, we are also working to strengthen the functions of prototyping and production facility development by establishing a consistent technology development system from development and prototyping to production line construction.

In this way, at YTC, the center of the global development base, engineers from different technical fields are gathered to promote synergy creation and technology development.



Technical exchange meeting

**Developing new technologies and business areas through open innovation**

We are promoting industry-academia-government collaboration with companies and schools that have seed technologies in order to enhance technology development that can capture market changes and embody the future needs of customers. At YTC, we have been able to improve the speed and quality of development through the use of the Collaborative Development Office, where partners are stationed. At the Collaborative Development Office, we are working to strengthen future robotics technologies and conduct feasibility studies in new business areas. For example, we are developing autonomous driving technologies to advance industrial robots and working with the National Federation of Agricultural Cooperative Associations to utilize robots in the agricultural field.



Use of robots in agriculture

In addition, we are accelerating research and development through comprehensive collaboration with Kyushu Institute of Technology, Kyushu University, and Tokyo Institute of Technology for the purpose of social implementation.

**Use of venture investments**

YIP\*<sup>1</sup>, a new business creation scheme that combines the CVC function\*<sup>2</sup>, promotes open innovation through investment and business alliances with start-up companies with potential business synergies in order to evolve core businesses and expand new fields utilizing mechatronics technology. A total of 19 investments were made in 15 domestic and overseas start-up companies from the start of the program in FY2016 through FY2022, and the following two investments were made in FY2022.

We accepted a third-party allotment of shares issued by Ugo Corporation (Headquarters: Tokyo). It is a venture company that develops and manufactures next-generation avatar robots and features remote control for security and inspection. We will explore the possibility of remote control of industrial robots in the FA industry in the future. We also invested in Connected Robotics Co., Ltd. (Headquarters: Tokyo). The company's mission is to innovate the food industry with robotics. By combining the company's software technology with Yaskawa's hardware, we aim to improve the productivity of the food industry and improve the quality of food.

\*1 Abbreviation for YASKAWA Innovation Program  
 \*2 Corporate Venture Capital. It refers to venture investment activities conducted by a company.

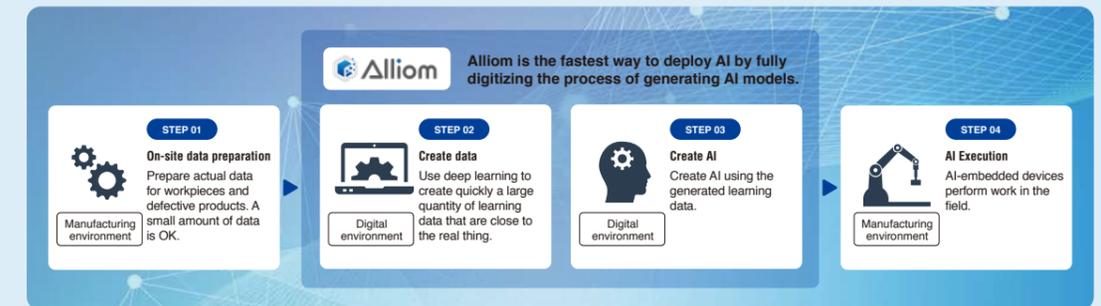
**Intellectual property strategy**

Taking advantage of the strengths of YTC, which brings together the entire company's technology development and intellectual property departments in one place, we are implementing innovative cross-divisional inventive activities for Yaskawa's core competency of mechatronics technology and <sup>13</sup>-Mechatronics solution concept technology. Also, we aim to build a patent network that contributes to our business by examining the effectiveness of our patent applications. In addition, we promote intellectual property protection activities for our products, locally developed products, and manufacturing know-how on a global basis in cooperation with overseas affiliates of the Yaskawa Group, mainly in the Intellectual Property Department. In addition, we conduct intellectual property education for each class and technical field as part of in-house education and strive to raise awareness of the importance of intellectual property and strengthen intellectual property activities.

**Use of AI**

Since its establishment in 2018, AI Cube Inc. (100% owned by Yaskawa Electric) has been carrying out various initiatives with the aim of "contributing to customers' production activities by creating a state where AI technology is used as a matter of course at manufacturing sites."

Alliom is the AI development process proposed by AI Cube to achieve this goal. By digitizing the AI function generation process, AI adoption can be achieved in a short period of time.



Ideas of Alliom can be deployed in a variety of applications. We utilize waveform data, image data, and component data to apply them to a variety of applications. To realize Alliom, we provide an AI development platform with an optimal user interface for each application.

## Human Resources to Support the World's First and World's Best Technology Development

Yaskawa's human resources that support the technology that is the source of value creation in Yaskawa Group



**K.Z**  
Drives  
Fundamental R&D  
management Dept.  
Corporate  
Technology Div.

I am engaged in the development of AC drive control technology. Specifically, I am working with the business division to develop control technology necessary to improve the performance of next-generation AC drive products. The developed AC drive control technology contributes to the company's profits by being applied to next-generation AC drive products and responding to customer needs.



**Y.M**  
Agriculture  
Mechatronics  
Development Dept.  
Corporate  
Technology Div.

I am developing automation technologies to improve productivity in the agricultural market. Among them, I am developing an automation system for cucumber cultivation using robots and AI recognition algorithms. In the future, we plan to apply the technology developed here into next-generation robots. We will apply the automation technology we have cultivated in the FA market at Yaskawa to develop new markets and address social issues such as labor shortages.



**M.K**  
Controller  
Development Dept.  
Corporate  
Technology Div.

I am engaged in the development of MPE720, an engineering tool that supports the sequence of equipment and cell startup. As this is the "face" that connects Yaskawa products with customers, I am aware that this is an important product that influences the impression of ease of use and so on, and am working on development every day. As control devices become more sophisticated and complex, and the tools to support them become increasingly important, I am striving to maximize customer productivity and minimize engineering costs.



**T.A**  
ASIC &  
Communication  
Fundamental R&D  
management Dept.  
Corporate Technology  
Div.

I am engaged in the development of dedicated IC chips (ASIC) for use in Yaskawa products. We are required to achieve high performance and functionality without increasing cost and power consumption in ASIC development. In order to achieve these goals, we have been discussing specifications with the product development department and designing circuits. We are making daily efforts to create new technologies with the aim of solving customer problems.



**H.T**  
AI Cube Inc.

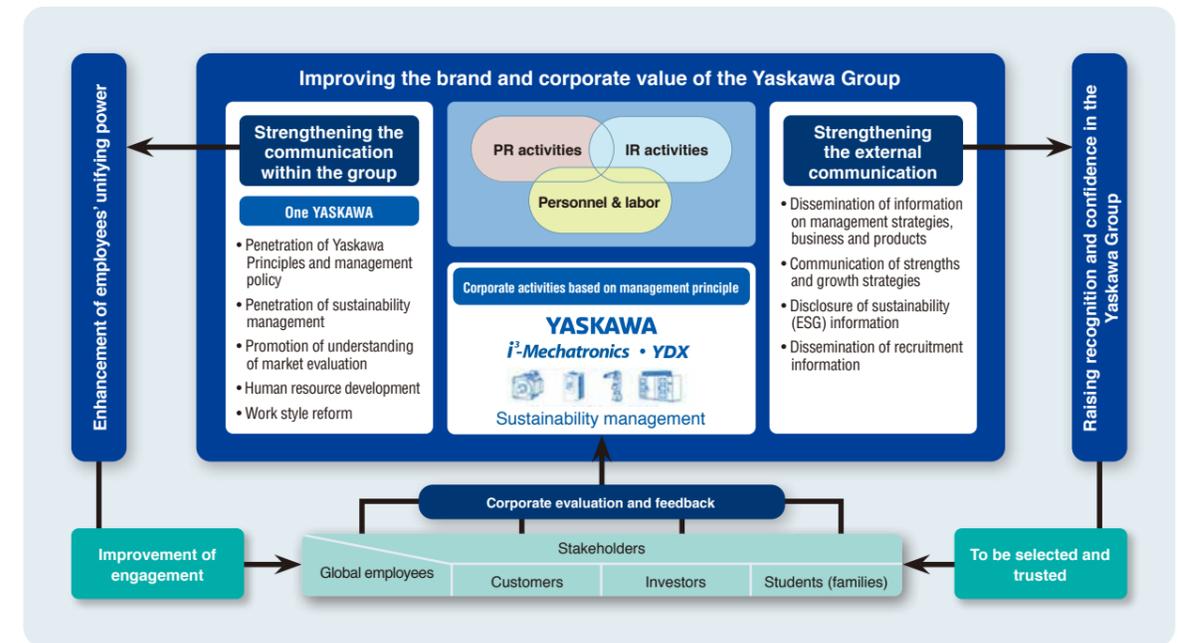
I conduct research and development in the field of robotics, including recognition technology using machine learning and motion generation technology in combination with simulators at AI Cube. In development, I value the concept of "three way satisfaction." I aim to become an engineer who can create and propose added value that customers have not yet realized while creating excitement among project members.

In FY2023, the Corporate Branding Division was established by integrating the human resources and labor organizations with the public relations and IR organizations. The aim is to accelerate the penetration activities of the Yaskawa Principles in terms of human resource development, improve the unifying power of the human capital, the global employees, and strengthen the brand power (to be selected and trusted). In addition, by strengthening our ability to disseminate information both within and outside the Yaskawa Group, we will contribute to the improvement of the brand and corporate value of the Yaskawa Group by not only fostering the "One Yaskawa" corporate culture, but also improving the unifying power of our employees and the recognition and confidence of our stakeholders in Yaskawa Group.



**Ayumi Hayashida**  
Senior Executive Officer,  
General Manager, Corporate Branding Div.  
General Manager, Corporate Communications  
Dept., Corporate Branding Div.

### Activity framework of Corporate Branding Division



### Implementation of human resources strategies linked to management strategies

In our human capital management initiatives aimed at realizing Vision 2025, we will implement human resources strategies linked to management strategies while placing the same emphasis on dialogue with employees and investors. Specifically, we strengthen human resources management that encourages human investment and the active participation of diverse human resources based on the visualized human resources data, as well as formulate human resources requirements necessary for the execution of business strategies.

In addition, in order to formulate sustainable management strategies and continue generating high results, we will select the next generation of senior management candidates who will lead the future of the Yaskawa Group at an early stage, and train and promote them through training programs and other means.

### Deepening the understanding of Yaskawa Principles

It is important for each employee to understand and practice the Yaskawa Principles as a driving force for realizing "Vision 2025" and for the sustainable growth of the Group toward the future. With this in mind, in FY2022 I began giving philosophy lectures globally. Philosophy education is based on "to know (understand)," "to learn (deepen)," and "to act (practice)," and is a place to learn the importance of understanding and practicing management principles. We will take time to provide philosophy education to many employees of the Yaskawa Group in a direct dialogue format to deepen their understanding of the Yaskawa Principles.

## Human Resources Strategy for Realizing Vision 2025

### Human capital initiatives

Yaskawa Group has established a global human resources philosophy that defines the basic idea to the human resources we seek and personnel systems.

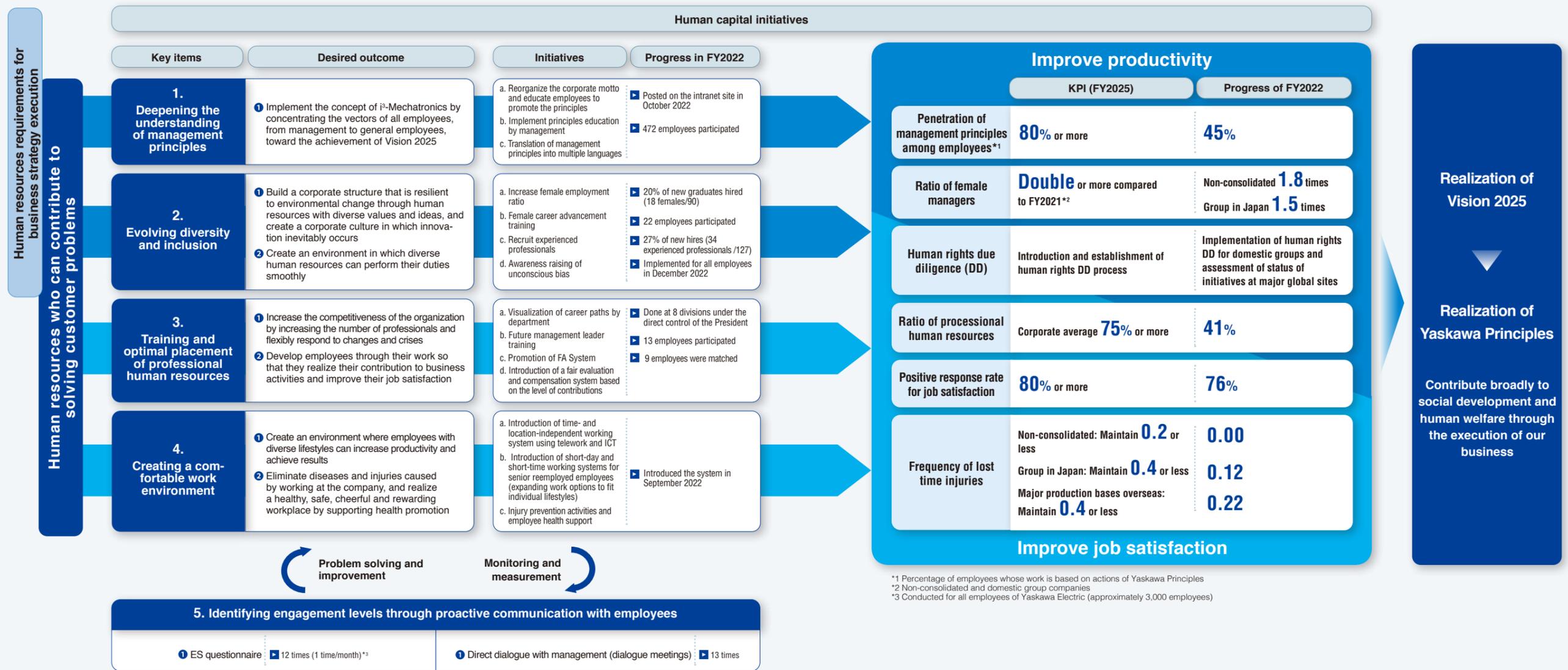
In order to realize Vision 2025, we will focus on “deepening the understanding of management principles,” “evolving diversity and inclusion,” “training and optimal placement of professional human resources,” and “creating a comfortable work environment.” By constantly monitoring these initiatives through proactive communication with employees, such as ES questionnaires and direct dialogue with management, we will quickly reflect the feedback in the improvement of human resources policies and accelerate the improvement of productivity and job satisfaction. Through these initiatives, we aim to continuously improve corporate value.

### Visualization and utilization of human resource data by YDX

Yaskawa defines the skills required for each department and job category, and assesses employees' current capabilities through annual skill checks. For example, in the technology department, employees' experiences and skills are visualized, and the information is used to assign the engineers to development themes and to formulate hiring plans.

In addition, Yaskawa Group is promoting initiatives to link and visualize human resource data globally through YASKAWA Digital Transformation (YDX). By analyzing and utilizing the collected data in a timely manner, we are speedily implementing various human resource initiatives, including recruitment, deployment, development, evaluation, and system management, while at the same time working to raise the level of human resource management.

## Overall human resources strategy



\*1 Percentage of employees whose work is based on actions of Yaskawa Principles  
\*2 Non-consolidated and domestic group companies  
\*3 Conducted for all employees of Yaskawa Electric (approximately 3,000 employees)

## Initiatives to Accelerate the Improvement of Productivity and Job Satisfaction

### 1. Deepening the understanding of management principles

#### Implementation of principles education on a global scale

In FY2022, with the aim of deepening the understanding and strengthening the practice of all global employees, corporate motto was reorganized into the Yaskawa Principles by dividing it into "Our Purpose," "Our Values," and "Our Actions." (See page 3-4.)

With an unwavering focus on achieving "Vision 2025," we conduct principles education through direct dialogue by management to increase the number of people who can embody the Yaskawa Principles and the

i<sup>3</sup>-Mechatronics solution concept.

Since FY2023, we have expanded the scope of participants to include group companies in Japan and overseas to deepen our understanding of management principle.

#### Monitoring by ES questionnaire

	2022/1	2023/1
Recognition of Yaskawa Principles	74%	94%
Penetration rate of Yaskawa Principles*	28%	45%

\* Percentage of employees whose work is based on actions of Yaskawa Principles

### 2. Evolving diversity and inclusion

Yaskawa Group strives to create a climate that creates new innovations by leveraging the strengths of diverse human resources, regardless of their job titles, gender, nationality, tenure, educational background, work structure, or lifestyle.

#### Advancement of women

In Yaskawa Group as a whole, women account for about 13% of managerial positions (FY2022). However, as a technology-oriented manufacturer, Yaskawa Electric (non-consolidated) has a problem with a low ratio of female managers as a result of the high number of technology-oriented employees and the low ratio of female science students. In addition, the results of our most recent in-house questionnaire showed that while the percentage of female employees who want to pursue managerial positions has improved, there is still a gap between men and women in terms of gender roles, although there is a trend toward improvement.

Based on these findings, we are conducting not only skill upgrading and mind-changing for female employees, but also training programs for potential female managers where managers change their attitudes

and strengthen their involvement in developing female employees. In addition, we are also conducting a questionnaire survey on unconscious bias to improve gender roles for men and women.

#### Monitoring by ES questionnaire

	2020/6	2021/6	2022/6
A workplace culture that leverages the strengths of diverse human resources*	59%	71%	78%
Willingness to be a manager	49%	45%	45%
Female employees	21%	22%	29%
Male employees	52%	50%	48%

\*Percentage of respondents who answered that their workplace has a climate in which they can utilize the strengths of diverse human resources

#### Recruitment of experienced professionals

In order to secure the personnel necessary to realize our management strategy, we actively recruit professionals with experience in each field. The ratio of experienced hires to total hires is increasing year by year.

#### Ratio of experienced hires

(Percentage of the number of employees hired as experienced professionals per year)

FY2018	FY2019	FY2020	FY2021	FY2022
7.8%	5.0%	11.9%	13.1%	26.8%

#### Localization of overseas operations

At Yaskawa Group, we are promoting the localization of our overseas operations based on the basic concept of management that considers operations on a global scale and operates locally. Currently, more than 40% of managers in Yaskawa Group are local personnel working overseas.

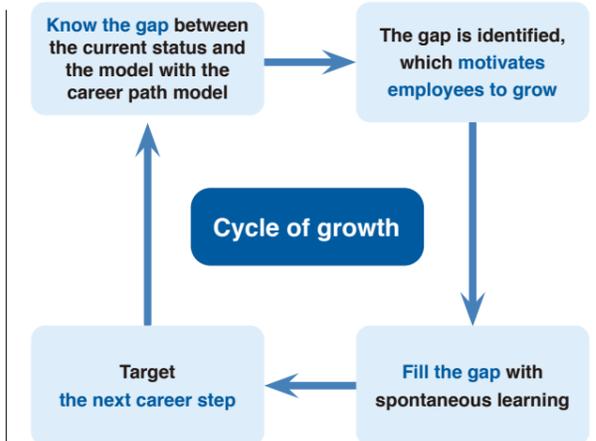


### 3. Training and optimal placement of professional human resources

#### Human resource development that respects autonomy

Based on the belief that the role of the company is to provide a place for employees to realize themselves, Yaskawa has introduced an education system that respects individual autonomy, from "education provided" to "self-learning education." By sharing a career path model and a career requirements definition document, the employees aim to realize themselves while growing sustainably through various education and training systems, grasping the gap between their "goals" and "current status."

\* Human resources at a level that allows them to teach others the skills they are assigned to perform, or at a level that allows them to perform by themselves



<b>Sharing career path models and creating career plans</b>	<ul style="list-style-type: none"> <li>Created career path models in all departments in FY2022 and shared them internally</li> <li>Support employees' autonomous career development by visualizing their aspirations and goals, and develop career plans tailored to each employee's motivation and aptitude for long-term human resource development</li> </ul>	<b>Free Agent system</b>	<ul style="list-style-type: none"> <li>The FA system was introduced in FY2020 to support employees' independent career development.</li> <li>More than 80% of the employees transferred under this system improved their job satisfaction compared to before using the system (confirmed by ES questionnaire).</li> </ul>
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#### Early promotion of young talent

We are promoting human resource development in Yaskawa under the slogan of "thinking logically and communicating things appropriately to others" as an ideal target for young talent (within the fifth year of employment). Through various types of education and training, we train young talents to acquire the

knowledge necessary for the work and develop their capabilities as early as possible. In addition, we provide opportunities for employees to think about their careers and aspirations from an early stage after joining the company, and we encourage them to develop their careers autonomously.

<b>Introductory training for new graduate hires and experienced professionals</b>	Acquire the necessary knowledge (management principle, company vision, company system, etc.) and develop a mindset for new employees	<b>Career plan presentation</b>	Employees up to the fifth year of employment think about what they aim for in the future and what challenges they face, and make presentations in the workplace.
<b>Follow-up training</b>	For employees in their second year of employment, in addition to acquiring necessary knowledge such as the company system, reconfirm what they can and should do based on their own characteristics, and form a career vision	<b>Yaskawa Freshers Technical School (YFTS)</b>	New technical employees acquire basic product knowledge and basic elemental technology (principles, etc.) necessary as Yaskawa engineers



YFTS training



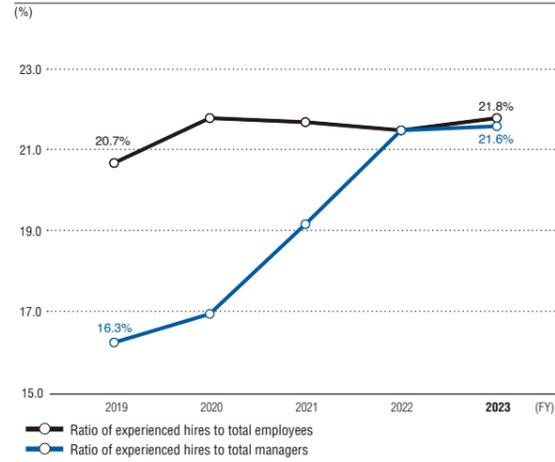
**Increasing the ratio of professionals and promoting experienced professionals**

In today's business environment, where we face global competition, it is necessary to professionalize each employee to maintain our competitiveness as a company. We believe that the more professionals we have, the more competitive our organization will become and the more flexible we will be in our ability to respond to changes and crises.

In order to improve the ratio of professionals, we have created an environment in which all employees actively learn the necessary abilities and skills and encourage autonomous growth by using OJL sheet skill checks and other measures.

In addition, we hire experienced professionals from outside and actively provide them with challenging opportunities, so that they can be selected and promoted to general managers and section managers depending on their contribution and roles.

**Ratio of experienced professionals hired to all Yaskawa employees and promotion of their appointment to general managers and section managers**



**Fair evaluation and compensation system based on contribution**

In order to improve employees' sense of contribution and job satisfaction, we have revised our approach to evaluate the accumulation of knowledge and skills at seniority, toward a system to fairly evaluate the results (contribution) achieved by performing duties, and have focused on reviewing treatment based on the role each employee plays and the scale of their duties.

In addition, in FY2021, we expanded the medium- to

long-term incentive system to employees in light of the fact that employees are the main contributors to the creation of corporate value. With the aim of raising awareness of participation in management, we provide stock compensation to managers and above and cash compensation to employees, which also encourages them to participate in shareholding associations, in accordance with the level of achievement of mid-term business plan, in order to raise awareness for Yaskawa Group's corporate value.

Details of implementation from FY2020 to FY2022				
Contribution	Duties	Revisions to role requirement definitions that clarify duties by qualification level		
	Results	Introduction of a job manager that enables managers and employees to check daily business plans and results		
Treatment	Evaluation	Introduction of an evaluation system that is fair to the degree of contribution made by setting the difficulty of evaluation themes		
	Rating	Integration of the role for promotion and general office role to expand growth opportunities		
	Compensation	Medium to long-term	Increased awareness of management participation through increased provision of medium- to long-term incentive programs	
		Single year	Review of compensation system equitable to contribution level (Management)	
			Review of compensation system equitable to contribution level (Regular and Re-employed employees)	
Retirement benefits	Introduction of performance-linked bonus formula with no maximum amount to be paid			
		Expansion of defined contribution pension plans (DC) to encourage self-help efforts		

**Monitoring by ES questionnaire**

	2021/5	2022/6	2022/11	2023/6
Satisfaction with the evaluation system	73%	76%	72%	79%
Rate of feedback on previous term's evaluation	71%	73%	82%	80%
Satisfaction with feedback	-	96%	96%	95%

**4. Creating a comfortable work environment**

**Realization of diverse working styles**

In FY2019, we introduced a telework system to create an environment in which productivity and results can be achieved regardless of time or place. In principle, this system does not set a limit on the number of days that can be used for childcare, nursing care, and balancing medical treatment with work. In addition, through the use of ICT, we have introduced a tool for managers and employees to confirm and communicate

their daily work plans and performance remotely and have developed a system that enables fair evaluation.

In FY2019, in order to encourage the participation of a diverse range of human resources, we reexamined the manner in which employees are transferred and introduced an area-limit system that allows employees to choose their work style in response to life events regardless of the reason.

**Creating a safe and healthy working environment**

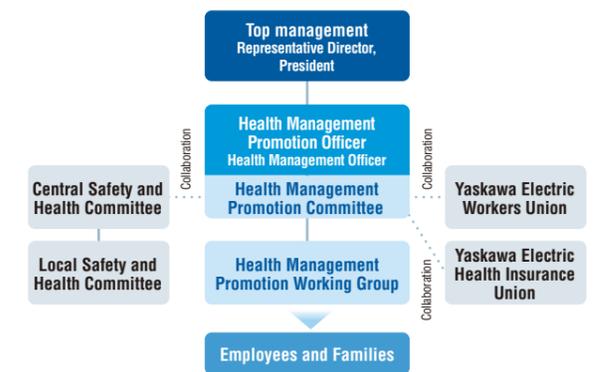
The Yaskawa Group Health Management Declaration has been widely declared internally and externally, and health management is promoted under the leadership of top management, with the Health Management Promotion Committee at the center.

**Yaskawa Group Health Management Declaration**

In order to realize Yaskawa Principles, "contributing to the development of society and the welfare of mankind through the execution of its business," we aim to maintain healthy, safe, cheerful and rewarding workplace as a group by supporting the development of health as a base for the job satisfaction of each employee.

1. We eliminate diseases and injuries caused by working in the company.
2. We increase the number of employees who practice health and safety activities autonomously.
3. We aim to create a safe, cheerful, and rewarding work environment for each employee.

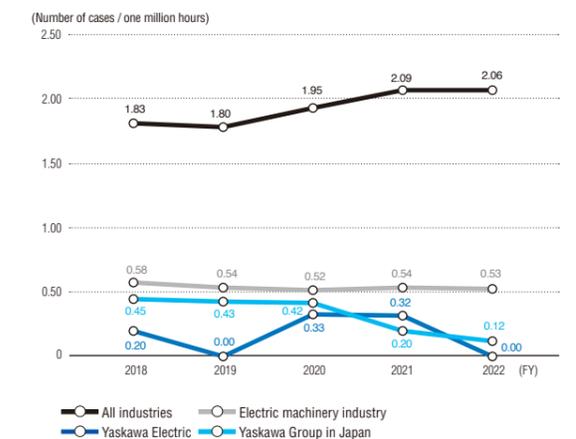
**Health management promotion system**



<b>Occupational safety and health</b>	Implement injury prevention activities at each workplace based on the concept of the occupational safety and health management system
	Conduct internal audits and provide thorough guidance of the safety and health committees at each workplace regarding the items pointed out
<b>Employee health support</b>	Health guidance and education focusing on lifestyle and work support in addition to various medical examinations and occupational disease prevention
	Establishment of an external consultation desk where employees can seek consultation on health, medical care, nursing care, childcare, mental health, etc., 24 hours a day, 365 days a year
<b>Mental health measures</b>	Lifestyle and employment support for psychiatric illnesses and disabilities
	Feedback to individuals and workplaces using the stress check system

The frequency rate of industrial accidents in Yaskawa and the domestic group remains below the average for the same industry.

**Frequency of work accidents (Frequency rate)**



## 5. Identifying engagement levels through proactive communication with employees

### PDCA of improvement through analysis of ES questionnaire

Since FY2016, we have been conducting monthly ES questionnaire surveys for employees of Yaskawa Electric in order to collect their individual opinions and not just monitor their satisfaction. Through registered questionnaires, we measure the level of understanding and penetration of management measures, the sense of busyness in the workplace, and the level of satisfaction with the human resources system. By analyzing the data in specialized department, we aim to solve various problems faced by employees through PDCA, and to foster a corporate culture in which management and all employees become more united. The response rate of the ES questionnaire exceeds 90% every month, and various opinions and requests are received.

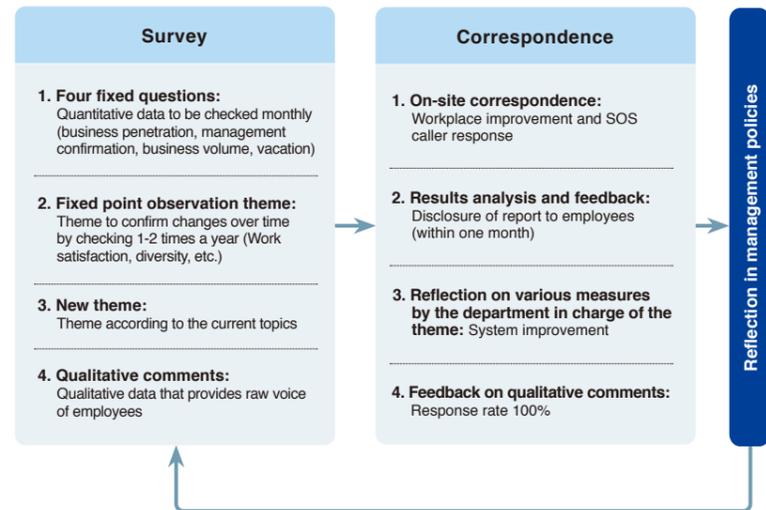
The results of the questionnaire analysis are shared internally every month, and we strive to provide feedback on all opinions and requests. We quantify the percentage of employees with job satisfaction every six months, and the positive response rate has remained high at around 80%. By analyzing the results of this survey in detail, we are able to identify the factors that contribute to the improvement of job satisfaction and the characteristics of each workplace in a timely manner and are working to make speedy improvements while prioritizing issues that need to be improved.

### Monitoring by ES questionnaire

	2020/1	2021/1	2022/1	2023/1
Satisfaction with the ES questionnaire	75%	81%	82%	81%
Changes and effects of the ES questionnaire*	52%	54%	59%	54%

\*Percentage of employees who responded that they felt internal changes and effects with the ES questionnaire over the past year

### PDCA for data-driven improvements



### ES questionnaire theme

(FY2022 results)

Part 1	Personnel and labor systems and pension systems
Part 2	Penetration of policies and targets for this fiscal year and CS (customer satisfaction)
Part 3	Job satisfaction and company performance
Part 4	Diversity, promotion of women's participation, childcare leave for men, evaluation system
Part 5	Crisis management (natural disaster response), health improvement, English skill improvement
Part 6	Human rights and social contribution
Part 7	Improvement activities, internal newsletters, welfare system
Part 8	Compliance, integrated report, management
Part 9	Job satisfaction and evaluation system
Part 10	Environmental awareness and diversity (unconscious bias)
Part 11	Yaskawa Principles, ES questionnaire
Part 12	ICT activities (YDX, information systems), internal control

### Direct dialogue with the president

We conduct our own activities to promote human resource development through direct dialogue (dialogue meetings) with management. As the president himself in charge of human resource development, under the motto of development of human resources who will play a role in the evolution of the Yaskawa Group, we expand the circle of communication with employees and strengthen the motivation of participants and the development of human resources that takes on challenges through interactive dialogue.



Based on the Universal Declaration of Human Rights, the United Nations Guiding Principles for Business and Human Rights, and the ILO Declaration on Fundamental Principles and Rights at Work, the Yaskawa Group has stipulated respect for human rights in Yaskawa Group Code of Conduct and manages businesses respecting the human rights of all people.

### Yaskawa Group Code of Conduct

In order to fulfill Yaskawa Group Principle of Management, which states Group mission is to leverage the pursuit of the business to contribute to the advancement of society and the well-being of humankind, as a member of global community, Yaskawa Group assumes that it is essential to conduct business in a fair and faithful manner and to solidify a trusting relationship with global community. In accordance with the principles set on its own, Yaskawa Group commit to respecting human rights, comply with applicable laws and regulations, and the spirit thereof, and proactively act toward the creation of a sustainable society based on good social conscience.

### Human Rights Principles

- Yaskawa Group contributes to the advancement of society and the well-being of humankind through its operations. Given the above premises, Yaskawa Group respects global communities and culture and custom in each country or region, complies with laws and regulations and ensures company policies are in accordance with applicable legislation. In the absence of legislation or policy Yaskawa Group chooses a course of action based on integrity.
- Yaskawa Group complies with applicable labor laws and regulations set by countries, regions and local governments.
- Yaskawa Group respects individual human rights and diversity of values and carries out activities in line with our worldwide "Yaskawa HR Values."

### Promotion system

Led by its Sustainability, General Affairs and Procurement divisions, the company is committed to respecting human rights in Yaskawa Group and its supply chain.

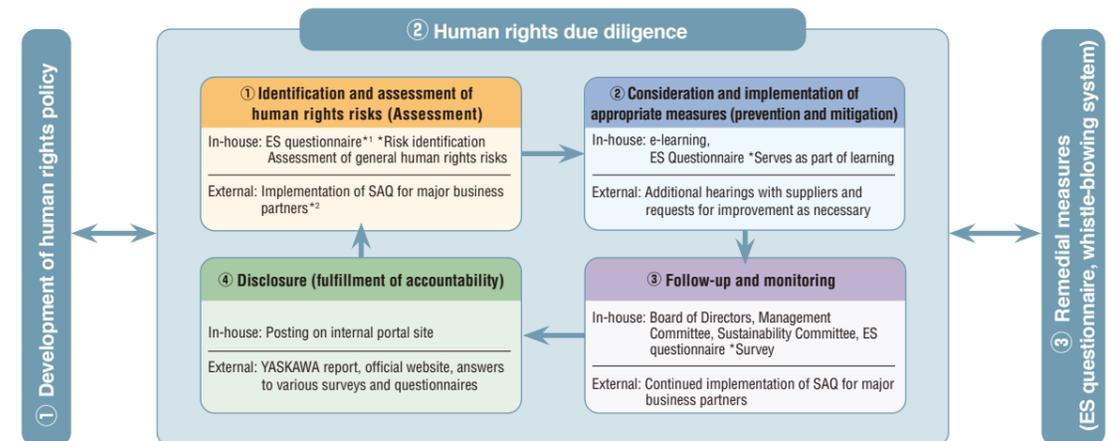
With regard to these initiatives, the Sustainability Committee, chaired by the president, deliberates and monitors measures on a regular basis.

### Human rights due diligence and remedial measures

In accordance with the United Nations Guiding Principles on Business and Human Rights, we have established a human rights policy, human rights due diligence and mechanisms for remedial measures.

Through these initiatives, we will continuously respond to ever-changing social demands and challenges regarding human rights. Specifically, we will identify and assess negative impacts and risks on human rights, implement appropriate measures, conduct follow-up surveys and monitoring, and disclose information.

Consultations are received through the monthly ES (Employee Satisfaction) survey (for all non-consolidated employees) and the whistle-blowing system (Compliance Hotline), and appropriate measures are taken.



\* 1 ES questionnaire: Employee satisfaction survey (non-consolidated, monthly)  
\* 2 SAQ (Self-Assessment Questionnaire)

### Education and enlightenment

We are continuously working to raise human rights awareness by conducting education and awareness

surveys for employees using e-learning and ES questionnaires. Since FY2022, we have been gradually expanding these initiatives to our domestic affiliates to raise awareness of human rights throughout the Group.

As a global company, the Yaskawa Group strives to improve the trust through dialogue and co-creation with stakeholders including customers, business partners, local communities, shareholders and investors. By doing so, we aim to create social value and solve social issues through our business together, with the aim of continuously enhancing corporate value.



### To Ensure Customer Satisfaction

**FY2022 results** To ensure that customers feel comfortable using Yaskawa products, we have established a global quality assurance system and are working to improve the safety and quality of our products, including our services. We have been promoting the unification of market quality information by encoding data from 8 sites around the world and catching signs of severe quality problems before they develop to detect and resolve them as soon as possible. In addition, as part of our quality fraud prevention activities, we conducted a comprehensive inspection that had product shipment tests to ensure that there were no significant defects based on contracts with customers.

**FY2023 initiatives** By further strengthening the rapid collection and response of market quality information on a global scale and by implementing data-based predictive maintenance, we are able to provide improved product and service quality so that our customers' facilities and lines don't stop. The Yaskawa Group strives to ensure thorough safety and quality control from a customer-oriented perspective, respond to customer's feedback in a timely and appropriate manner, and continuously improve our products so that customers can trust us even more.



Maintenance by a service engineer

### To Build a Sustainable Supply Chain

**FY2022 results** In order to confirm compliance with the Sustainable Procurement Guidelines\*<sup>1</sup> newly established in FY2021, we asked the major suppliers\*<sup>2</sup> to respond to SAQ (Self-Assessment Questionnaire) and confirmed 100% compliance.

**FY2023 initiatives** In order to achieve the target of FY2025, 100% compliance of the Sustainable Procurement Guidelines as Yaskawa Group overall, we will further strengthen our cooperation with domestic and overseas group companies and steadily advance our group-wide response to social issues in procurement activities. In FY2023, we aim to achieve 100% compliance of the major suppliers of domestic group companies. In addition, we will establish sustainable procurement guidelines for overseas group companies and prepare for implementation of SAQ.

\*<sup>1</sup> Sustainable Procurement Guidelines: <https://www.yaskawa-global.com/company/csr/scm/guidelines>  
 \*<sup>2</sup> Major suppliers: Suppliers that accounted for 80% or more of total procurement in Japan of the previous fiscal year

### Contributing to Local Communities

**FY2022 results** In FY2022, despite the impact of the COVID-19 pandemic, we continued to support education, sports promotion, culture, and the arts.

We are supporting the development of human resources in science and engineering in Kitakyushu, a manufacturing city, and promoting CSR activities to co-create with the community, such as accepting school trips in YASKAWA Innovation Center on an on-site and remote basis, being the main sponsor of the Giravanz Kitakyushu, soccer team, participating in the Kitakyushu Marathon as a volunteer for the first time in 3 years, providing industrial robots and technical

assistance to one of the exhibition corners of Kitakyushu City Science Museum's Space LABO, assisting students at technical high schools in obtaining licenses to operate robots, and holding an online event called "Girls Day" to support middle and high school girls in their career choices.

In addition, the Yaskawa Group provided support for the reconstruction of local tourism resources that were affected by the disaster, as well as supplies and funds to help the reconstruction of the affected areas in the Turkey-Syria earthquake in February 2023.



Kitakyushu marathon volunteer



The exhibition at Kitakyushu Science Museum Space LABO



Handmade motor workshop

**FY2023 initiatives** In order to expand "program for the development of manufacturing human resources," we will consider the next direction among ideas gathered from all employees in FY2022. We will also increase opportunities for employees to participate in community activities. In addition, we will establish a system to

accept more people at YASKAWA Innovation Center in order to support the daily life after the COVID-19 pandemic. We will continue to provide as much support as possible and contribute to the revitalization of local communities.

### Dialogue with Shareholders and Investors

**FY2022 results** Yaskawa believes that it is important to promote constructive dialogue with shareholders and investors in order to achieve sustainable growth and increase corporate value over the medium to long term. When necessary, the president, the director in charge of investor relations, the general manager of corporate communications, and other senior management actively engage in dialogue with shareholders and investors. In FY2022, we engaged in dialogue with a total of 1,214 institutional investors and analysts. The opinions received at the dialogue are fed back to the management to improve management measures.

Activities	Results
Results briefing for analysts and institutional investors (telephone conference, etc.)	6 times
One-on-one meeting with institutional investors	412 meetings
Conference meeting hosted by securities companies	78 meetings
Meeting at NDR* <sup>3</sup>	49 meetings
Seminar for individual investors	2 times

\*<sup>3</sup> In FY2022, the face-to-face meetings were resumed in addition to online meetings.

**FY2023 initiatives** In FY2023, we will continue to disclose information necessary for making investment decisions in a timely and appropriate manner, and work to deepen relationships of trust with shareholders and investors through constructive two-way dialogue with the aim of further increasing corporate value. In June 2023, we held "YASKAWA IR Day 2023 (mid-term business plan briefing session)," in which the

management and division managers explained their medium-term business strategies and directions for value creation, and engaged in lively interactive discussions. We received feedback from participants, saying that they deepened understanding of the strategy and that they were impressed by the enthusiasm of the top management.

# Environment

Yaskawa Group's environmental management is driven by both its Green Process, which aims to reduce the environmental impact of Yaskawa's operations, and its Green Products<sup>\*1</sup>, which aim to help customers around the world reduce their environmental impact through Yaskawa products.

In particular, we recognize that addressing the issue of climate change is an urgent global issue, and we set a unique target for reducing CO<sub>2</sub> emissions by Yaskawa products by more than 100 times the amount of CO<sub>2</sub> emissions produced by Yaskawa Group (CCE 100) by 2025, and are promoting environmental management.



<sup>\*1</sup> We evaluate the degree of environmental contribution of a product from three perspectives: prevention of global warming, resource conservation and recycling, and proper management of chemical substances. Products that meet certain standards are certified as Green Products, and products that demonstrate the highest level of environmental performance in the industry are certified as Super Green Products.

## Goals and progress of the mid-term environmental plan

	Targets for FY2022	Achievements in FY2022	Self-evaluation	New mid-term plan targets (FY2025)
Green Processes	The Group's CO <sub>2</sub> emission reduction rate 10% (Compared to FY2018)	20.0%	◎	30%
	CO <sub>2</sub> -free electric power rate 58% (Yaskawa Electric)	58.4%	○	75%
	Reduce volume of waste discharged by the Group FY2018 results (3,986 tons) or less	3,390 tons (Compared to FY2018: 85%)	○	Maintain below FY2018 results
	Proper water management Reduce volume of water consumed by the Yaskawa Electric FY2018 results (216,000 m <sup>3</sup> ) or less	169,000 m <sup>3</sup> (Compared to FY2018: 78%)	○	Reduce 1% compared to FY2022
Green Products	Contribution to reducing CO <sub>2</sub> emissions through products 73 million tons or more (Cumulative since FY2016)	78.92 million tons (Cumulative since FY2016)	○	120.00 million tons (Cumulative since FY2016)
	100% compliance with the RoHS Directive (ten substances including four additional substances excluded)	100% compliance with the RoHS Directive (four additional substances response completed)	○	100% compliance with the RoHS Directive
Management	Increase in the number of companies covered under EMS in the Yaskawa Group Environmental impact load ratio: 95% or greater	Environmental impact load ratio: 99.0%	○	98% or more

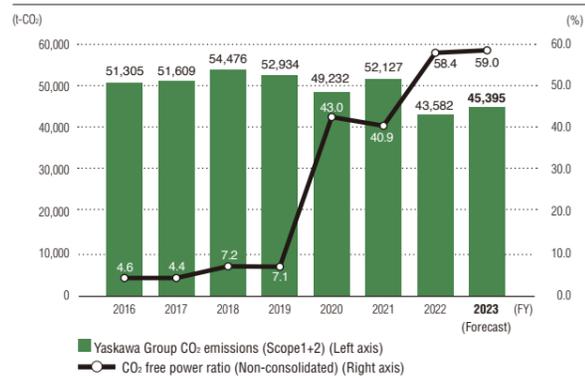
Self-evaluated achievement ratios to targets: ◎130% or more, ○100% or more, △50% or more, × under 50%

## Achievements and Challenges in FY2022

**Achievements** In FY2022, we achieved the targets of the Mid-Term Environmental Plan. During the Mid-Term Plan, we focused on reducing CO<sub>2</sub> emissions in green processes, and actively adopted CO<sub>2</sub>-free electricity from electric power companies as well as solar power generation. At the same time, we worked to reduce energy consumption through stable operation of solar power generation facilities, investment in energy-saving facilities, and individual energy-saving activities. As a result of these efforts, Yaskawa Electric alone achieved a CO<sub>2</sub>-free power ratio of approximately 58% in FY2022, which greatly contributed to the reduction of CO<sub>2</sub> emissions in our group. With regard to our group EMS<sup>\*1</sup> activities, we have established a system for promoting these activities in overseas group companies, and the overall scope of our supervision has been expanded to 99.0% of the environmental impact ratio. In the new mid-term plan, we plan to maintain a level of 98% or higher, even with the expansion of our bases.

In addition, our group's greenhouse gas reduction targets<sup>\*2</sup> were certified by the SBT initiative<sup>\*3</sup> as science-based targets for keeping global average temperatures rise below 1.5°C from pre-industrial levels.

Trends in group CO<sub>2</sub> emissions and CO<sub>2</sub> free power ratio (Non-consolidated)

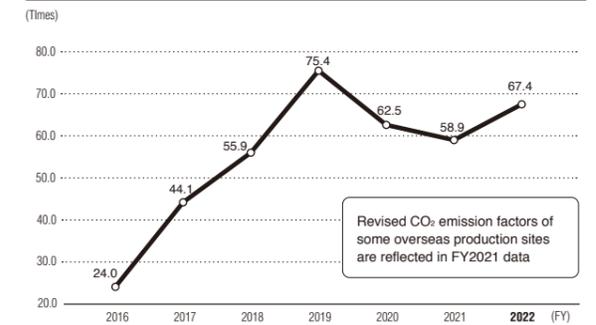


**Challenges** In FY2022, we achieved the FY2022 target of our mid-term plan.

With regard to CCE100, we greatly achieved the target of reducing CO<sub>2</sub> emissions, which is an indicator of green processes, and CCE increased to 67.4 times, but we will further strengthen our efforts to achieve the target of 100 times in FY2025.

<sup>\*1</sup> Environmental Management System  
<sup>\*2</sup> Reduce CO<sub>2</sub> emissions from our group's business activities (Scope 1+ Scope 2) by 51% in 2030 compared to 2018. Reduce CO<sub>2</sub> emissions upstream and downstream of our supply chain (Scope 3) by 15% in 2030 compared to 2020.  
<sup>\*3</sup> Science Based Targets initiative: An international initiative that certifies that companies' CO<sub>2</sub> reduction targets are consistent with scientific evidence

Trends in CCE100 (CO<sub>2</sub> emission reduction contribution from Yaskawa products/CO<sub>2</sub> emission from Yaskawa group)



## Future Initiatives

With the aim of achieving carbon neutrality by 2050, we will promote environmental management throughout the Group and accelerate the reduction of the environmental impact of production activities based on our global structure in cooperation with factories in Japan, Europe, the United States and China.

In addition to thoroughly reducing energy use through measures that have been implemented to date, such as replacing lighting with LEDs, upgrading air conditioning systems, and increasing the efficiency of production facilities, the Group will also promote group-wide decarbonization by installing photovoltaic panels at each plant and office, including overseas Group companies, and introducing CO<sub>2</sub>-free electricity.

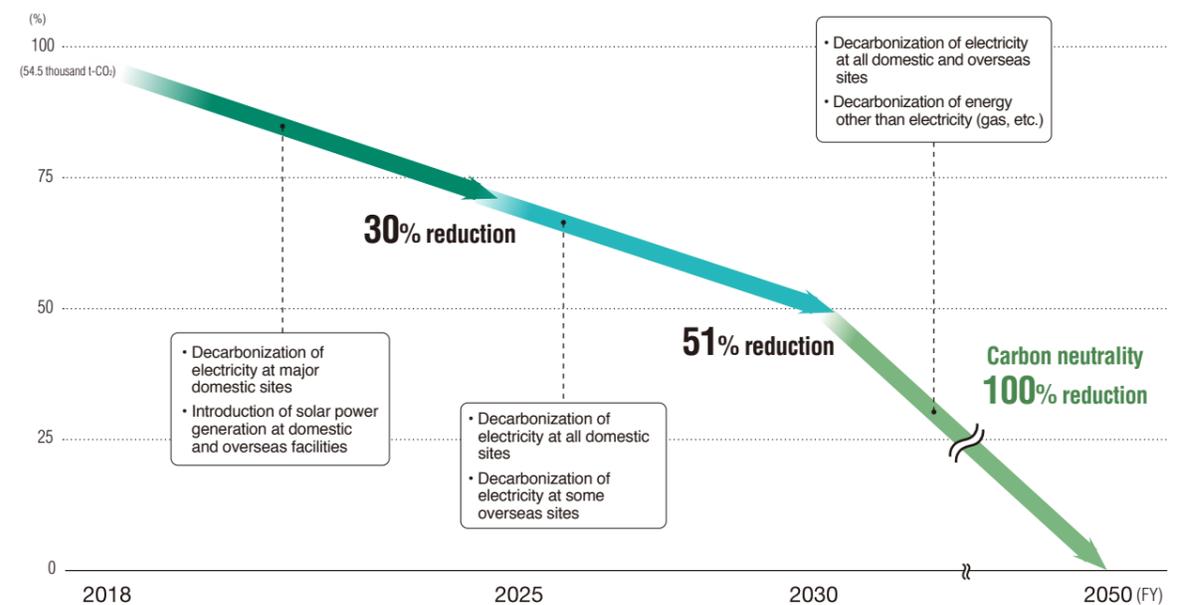
Under the new mid-term plan, in addition to the

existing measures, we will actively engage in more resource-saving activities than ever before, such as reducing plastic waste and water consumption.

We will also increase the share of green products in revenue for the entire Group and accelerate our efforts to increase the environmental contribution of our products and reduce the environmental impact by complying with the European RoHS Directive, REACH and other regulations and ensuring that we control the chemical substances contained in our products.

In addition, in line with the results of information disclosure based on TCFD recommendations made in May 2021, we will address the risks and opportunities identified and further disclose information in light of stakeholder feedback.

## Milestones for achieving carbon neutrality by FY2050



Endorsement of TCFD Recommendations and Initiatives

Yaskawa group expressed its support for the TCFD Recommendations in September 2019, and in September 2020, we participated in the Ministry of the Environment Support Project for Scenario Analysis of Climate Risks and Opportunities in line with the TCFD Recommendations. Through these and other activities, we disclosed information related to climate change based on the TCFD recommendations in May 2021. Going forward, we will continue to enhance information disclosure related to climate change and continue to conduct business activities that are even more environmentally friendly, in order to contribute to the realization of a sustainable society and further enhance our corporate value.

Information Disclosures Based on TCFD  
<https://www.yaskawa-global.com/company/csr/env/tcfd>

Governance

Based on our sustainability policy, Yaskawa is identifying sustainability challenges and targets (materiality) in the Board of Directors and Management Committee that serve as important challenges for sustainable growth and deciding on measures to solve those challenges and targets. We have also established the Sustainability Committee, which is chaired by the president and attended by heads of related divisions and outside directors as advisors, as our sustainability promotion system in order to monitor and accelerate the deployment of sustainability measures for the Group as a whole. For our response to climate change, we have positioned it as an important challenge in our materiality, and we are monitoring it in the Sustainability Committee. For the overall execution of these and other measures, we are conducting PDCA (plan, do, check, action) management in the organization for environmental promotion, which is run by the corporate environmental officer appointed by the president.

Additionally, the achievement of CO<sub>2</sub> emissions reduction targets through Yaskawa products is being evaluated and incorporated into the compensation of directors (excluding outside directors and directors who are members of the Audit and Supervisory Committee) with the goals of achieving sustainable corporate activities and responding to social issues.

Strategy

We have investigated the risks and opportunities caused by climate change in motion control, robotics, and system engineering, which are our primary businesses. These risks and opportunities can be thought of as “transition” risks and opportunities caused by changes such as measures for climate change (e.g., policies and regulations) and “physical” risks caused by changes such as natural disasters and rising temperatures. We have derived these risks and opportunities and evaluated their impact on our business activities as serious, moderate, or minor. The derived risks and opportunities with a moderate and serious impact were analyzed with 2°C and 4°C scenarios for society in 2030.

We have also learned that the impact on our financial plan from these analysis results is a larger increase in sales due to opportunities than a reduction in sales due to risks.

As a response to these opportunities, the Yaskawa Group is working on factory automation and optimization based on “i<sup>3</sup>-Mechatronics,” and moving into new challenges that expand the areas in which mechatronics are applied for the sustainable development of the society as the goal in our long-term business plan “Vision 2025.”

2°C scenario

A certain response is required to the intensification of unusual weather, but the response to the rising cost of materials and resources is more important.

On the other hand, there are opportunities created by moving forward with reductions in carbon, such as expanding demands for factory automation devices, industrial AC drives, and renewable power generation equipment, as well as a solutions business that increases productivity and energy saving performance in the factories and equipment of companies by using these devices.



4°C scenario

Carbon reduction is not promoted and unusual weather intensifies, so the response to physical risks caused by this are considered the most important challenges.



Business impacts related to risk and opportunity factors

Risk/ Opportunity	Transition/ Physical	Factor	Impact	Evaluation
Risk	Transition	Carbon price	• Increased fuel and material procurement costs due to the introduction of carbon taxes by national governments.	Serious
		Government policies on carbon emissions	• Increased costs (e.g., purchasing clean energy) that accompany the introduction of emissions trading and the strengthening of emissions regulations.	Serious
		Transformation to energy savings and carbon reductions	• Production impacts due to price increases and procurement difficulties for reasons such as insufficient related materials from electrification and the transition to electric vehicles.	Serious
		Recycling regulations	• Increased costs from using substitute materials, etc., due to regulations such as those on plastics.	Minor
		Growth of lowcarbon technologies	• Increased investment costs, such as R & D costs, due to increased competition in the energy saving performance of products against a background of increasing demands for energy savings.	Moderate
		Changing behavior of investors and customers	• Increased support costs due to investors and customers preferring companies that are more environmentally responsive. • Decreased company valuation and loss of business opportunities due to delayed responsiveness to environmental responsibility related to information disclosure and procurement.	Minor
Risk	Physical	Increasing average temperatures	• Increased energy costs due increased air conditioning energy in our factories. • Need to move production sites where the risk of flooding exceeds tolerances due to sea rise.	Moderate
		Intensification of unusual weather	• Operation stoppages, reductions in production, and additional investment to restore equipment from typhoons, tornadoes, and flooding.	Serious
Opportunity	Transition	Transformation to energy savings and carbon reductions	• Increased demands for factory automation devices and industrial AC drives due to increased energy saving needs. • Expanded business opportunities for solutions that increase the productivity and energy saving performance of factories and equipment. • Expanded demand for solar power generators and wind power/geothermal power/biomass power generation equipment due to feed-in tariff incentives and so on. • Expanded business opportunities for electronics in electric vehicles as the electrification of automobiles progresses. • Expanded business opportunities for marine electronics due to increased demands for electric and hybrid ships.	Serious
		Changing behavior of investors and customers	• Increased investor valuation, increased ESG investment, and increased corporate value due to expansion of businesses that contribute to the environment.	Minor

Main scenarios used in the scenario analysis  
 - Used mainly to analyze transition risks: IEA<sup>\*1</sup>, SDS<sup>\*2</sup>, STEPS<sup>\*3</sup>  
 - Used mainly to analyze physical risks: IPCC<sup>\*4</sup>, RCP2.6<sup>\*4</sup>, RCP8.5<sup>\*4</sup>  
<sup>\*1</sup> International Energy Agency  
<sup>\*2</sup> Sustainable development scenario  
<sup>\*3</sup> Stated policies scenario  
<sup>\*4</sup> Intergovernmental panel on climate change  
<sup>\*5</sup> Scenario in which the average temperature of the world rises about 2°C over the average temperature before the industrial revolution  
<sup>\*6</sup> Scenario in which the average temperature of the world rises about 4°C over the average temperature before the industrial revolution

Risk management

The Yaskawa Group has established the Risk Management Committee with a committee head appointed by the president to swiftly and accurately handle risks that may pose a problem either directly or indirectly to the management and business operations of the Group. The Risk Management Committee evaluates, manages, plans measures, and implements those measures for companywide risks.

This committee also evaluates and manages risks related to climate change. When a crisis occurs, this committee establishes a crisis response headquarters according to the level of the crisis and implements a suitable response.

The Risk Management Committee shares information with the Board of Directors, Management Committee, and Sustainability Committee, and it supervises and monitors risk management for the entire company while also attempting to enhance risk management company-wide by ensuring consistency in risk assessments and materiality analysis.

Metrics and targets

In order to prevent global warming, which is a social issue for all humankind, Yaskawa will go carbon neutral in 2050, essentially eliminating the CO<sub>2</sub> emissions (scope 1 + scope 2) that accompany Yaskawa Group global business activities, and as a milestone for achieving that goal, we have also established a target called “2050 CARBON NEUTRAL CHALLENGE” to reduce those same CO<sub>2</sub> emissions by 51% in 2030 compared to 2018. In addition, the company has also set a target of reducing its 2030 CO<sub>2</sub> emissions by 15% from the 2020 level for emissions upstream and downstream in the supply chain (Scope 3).

We are also contributing to the reduction of CO<sub>2</sub> emissions in the world through the supply of AC drives and other products that boast the world’s highest performance utilizing power conversion technology, which is Yaskawa’s core technology. To this end, Yaskawa is working to achieve “CCE 100,” with which it will promote the reduction of CO<sub>2</sub> emissions of the world through its products and make the reduction more than 100 times the amount of CO<sub>2</sub> emitted by Yaskawa Group in 2025.

To achieve these goals, Yaskawa has introduced an internal carbon pricing system (internal carbon price: 5,000 JPY/ t-CO<sub>2</sub>) and is making aggressive environmental investments.

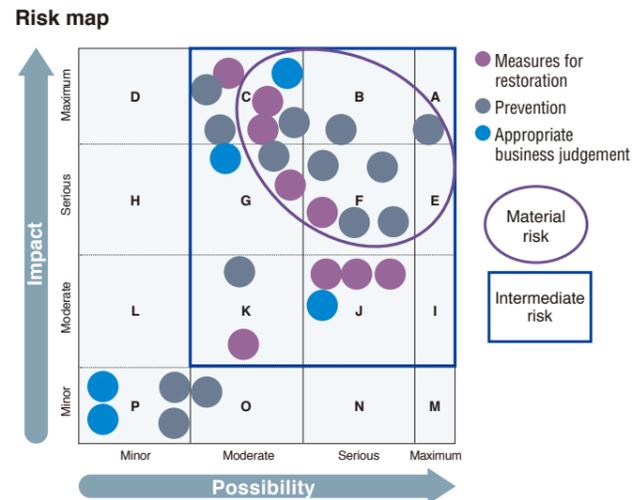
Please refer to the following URL for Yaskawa’s Scope 1, Scope 2 and Scope 3 emissions.  
<https://www.yaskawa-global.com/company/csr/group/esg-data>

## Risk Management Policies and Systems

The Yaskawa Group monitors risks related to management performance, including economic and market conditions, at the management committee and the Board of Directors. In addition, the Yaskawa Group has established the basic rules for crisis management to promptly and accurately address risks that may arise in the Yaskawa Group. In accordance with these rules, the Risk Management Committee and its specialized committees have been established. The Risk Management Committee carries out matters related to the development of a risk management system, the planning and promotion of risk management education, and various actions to be taken when risks arise. The condition of risk management is reported to the management committee and the Board of Directors as appropriate.

### Definition and classification of risks

The Yaskawa Group classifies risks into three categories: (1) risks such as natural disasters that are beyond human control, (2) risks that have internal causes, such as compliance issues, and (3) risks that should be taken as management decisions, such as investments in new businesses. The Yaskawa Group then identifies risk items, classifies them in terms of their impact and possibility, and implements appropriate measures for each item.



Types of risk	Examples	Measures
① External risk	Natural disasters, terrorism, conflicts, infectious diseases, accidents, etc.	Measures for restoration
② Internal risk	Compliance risks such as information leaks, quality issues and cartels	Prevention
③ Risks associated with the conduct of business	Expansion into new fields, investment in R & D, etc.	Appropriate business judgment

Arrows from the 'Measures' column point to 'Risks to avoid' (for External and Internal risks) and 'Risks to take' (for Risks associated with the conduct of business).

### Specific examples of risks and measures

Important risks that may affect the Yaskawa Group's business performance, financial status, etc. and their measures are as follows. In addition, compliance, quality issues, human resource retention, natural disasters (such as earthquakes and floods), terrorism/disputes, and legal regulations are recognized as risks and measures are taken.

#### Geopolitical risks (Changes in international relations)

Description	Measures
The Yaskawa Group has business bases in 30 countries and provides products and services to customers on a daily basis. Changes in international relations, as well as social and environmental changes and changes in laws and regulations that result from changes in international relations, may have an impact on our business activities. In particular, Yaskawa Group's operating results and financial condition may be affected when development, production, logistics, and sales activities are restricted, which hinder supplying products to customers by restrictions on exports and technology transfer and tariff increase in each country.	We regularly monitor political and economic conditions and trends in laws and regulations in each region through our business bases and have established a system that enables us to quickly grasp the impact on our business. In addition, when a wide range of business activity risks arising from geopolitical risks is materialized, the company takes prompt initial responses through the Risk Management Committee at the headquarters and works to minimize damage by building an effective global incident response system in cooperation with each expert committee and the management committee.

#### Risks related to materials procurement and logistics

Description	Measures
The Yaskawa Group procures raw materials such as steel materials and various parts from a number of suppliers, but it may not be able to obtain necessary quantities continuously due to surging procurement prices or increasing demand in the industry. Furthermore, due to natural disasters, expansion of infectious diseases, accidents, and worsening business conditions, it may be difficult for suppliers to provide Yaskawa Group with parts and raw materials in a stable manner. Most recently, the risk of delivery delays became apparent due to the global semiconductor shortage and supply chain disruptions caused by COVID-19.	The Yaskawa Group is working to strengthen its procurement functions. For example, we are building relationships of trust through dialogue with suppliers, diversifying our suppliers globally, responding to demand fluctuations by ensuring appropriate inventory levels and promoting local production and procurement, and enhancing our responses to disaster risks through the formulation of Business Continuity Plans (BCP) for our domestic and main overseas bases. In addition, we are working to identify risky parts early and strengthen company-wide measures, and for parts that continue to be hard to obtain, we are strengthening our response by changing the design to parts that are available.

#### Risks related to exchange rate fluctuations

Description	Measures
The Yaskawa Group is exposed to the risk of exchange rate fluctuations because it operates globally, and its business partners are located all over the world. In addition to selling and providing products and service and purchasing raw materials and parts in local currencies such as USD, EUR, and CNY, the Yaskawa Group also exports products in local currencies. Unexpected fluctuations in exchange rates could weaken the competitiveness of the Yaskawa Group's products and adversely affect its operating results and financial condition. In addition, as the Yaskawa Group holds assets and liabilities denominated in local currencies, foreign exchange rate fluctuations may have an adverse effect on the Yaskawa Group's financial position, which is reported in JPY.	The Yaskawa Group is working to build an earnings structure that is resistant to exchange rate fluctuations by promoting local production and procurement in addition to executing forward exchange contracts and currency hedging.

#### Risk of increased competition

Description	Measures
The Yaskawa Group has strong competitors in each of its business areas. In the face of intensifying price competition in particular, there is no guarantee that Yaskawa Group will remain competitive in the future, even in areas where it has a high market share. Intense price competition may adversely affect Yaskawa Group's performance and financial position. In addition, it is necessary to launch products in a timely and appropriate manner in order to secure competitiveness in technology and quality. If the competitiveness of Yaskawa Group's products is relatively weak or if the timing of product rollout is inappropriate, Yaskawa Group's performance and financial position may be adversely affected.	The Yaskawa Group is continuously strengthening R & D across its divisions centering on YASKAWA Technology Center. In addition to developing innovative products that are the world's first and the world's best, we are working to shorten the development time by thoroughly improving efficiency and to bring highly cost-competitive products to market in a timely manner. At the same time, the company is working to differentiate its products and services and increase added value by providing optimal solutions for customers through i <sup>3</sup> -Mechatronics.

#### Risks related to sustainability issues (Climate change and human rights)

Description	Measures
With regard to climate change, there is a possible risk of "transition" caused by changes in policies, regulations, and other climate change measures, as well as changes in social demands. Examples include increases in fuel and material procurement costs resulting from the introduction of carbon prices and carbon taxes by national governments and increases in costs such as purchasing green power resulting from the introduction of national carbon emissions policies and emissions trading and the tightening of emissions regulations. In the case of human rights, there is a need to address issues such as forced labor and child labor by not only companies but also their business partners. Response is required as a social requirement. Inappropriate responses to these risks may affect corporate value.	In response to these risks, Yaskawa Group has expressed its support for the TCFD recommendations on climate change, promoted various activities, including participation in a project to support scenario analysis of climate risks and opportunities in line with the Ministry of the Environment's TCFD, and disclosed climate-related information based on the TCFD recommendations. We will continue to conduct business activities that are even more environmentally friendly to contribute to the realization of a sustainable society and further enhance our corporate value. Regarding human rights, we have established respect for human rights in the Yaskawa Group Code of Corporate Conduct based on the Universal Declaration of Human Rights and the United Nations Guiding Principles on Business and Human Rights, and we are promoting measures that respect the human rights of all people. The promotion system is led by the sustainability department, the general affairs department and the procurement department, and we are working to respect human rights in Yaskawa Group and in the supply chain. About these initiatives, the Sustainability Committee deliberates and monitors measures on a regular basis. Through these initiatives, we will continuously respond to the ever-changing social demands and issues related to human rights.

#### Information security risks

Description	Measures
We hold personal information, including customer and business partner information and employees, in the Yaskawa Group's business fields. A server or system shutdown caused by a cyber-attack, computer virus infection or unauthorized access may cause a business shutdown. In addition, if information held by Yaskawa is leaked outside the company or false rumors about Yaskawa are spread via SNS or other means, the credibility of the market, including customers, may be lost and Yaskawa's business continuity may be adversely affected.	In normal times, we have been promoting activities to strengthen our information security infrastructure, and globally monitor and collect information on the latest sophisticated cyber attacks, trends in daily vulnerability information, and brand surveys. When information security risks related to the Yaskawa Group are foreseen or detected, our risk management system and the CSIRT system, which can immediately implement appropriate responses, work together to respond to incidents and maintain and strengthen resilient information systems that can predict, recover, and adapt to risks. Through these activities, we will minimize risks related to Yaskawa's information security and provide highly reliable products and services to our customers.

**Achieve further growth by constantly pursuing forms of governance that contribute to our group's long-term enhancement of corporate value**



Hiroshi Ogasawara  
Representative Director,  
Chairman of the Board

**Pursuing governance for long-term enhancement of corporate value**

We are thinking about how Yaskawa's corporate governance should be, while focusing on "enhancing our corporate value over the long term by providing high value-added proposals with differentiated products and services and building strong relationships of trust with customers as a B-to-B global manufacturing company." In addition, we have implemented new measures to enhance corporate governance in order to build an effective system by gaining awareness from norms such as the Corporate Governance Code, rather than aiming at them. We intend to continue discussions and deliberations.

At our group, the president is responsible for the execution of operations, and the chairperson is responsible for supporting the president's business management, including building smooth relationships with external stakeholders, including industry associations and government agencies. As chairman, I am in a position to promote governance throughout our group, and as a former president, I provide advice on the direction of business execution.

As chairman of the Board of Directors, the Board of Directors monitors the status of implementation of important issues and themes and the execution plan for them, while keeping in mind that the Board of Directors will exercise its supervisory function in order to improve the effectiveness of corporate governance with the ultimate objective of sustainable corporate value enhancement. In order to achieve this, it is particularly important to share and understand the status of individual operations of our group's distinctive business with internal and

external directors. Therefore, we have expanded our activities, including meetings to exchange opinions and visits to business sites. As we discuss how to conduct business operations based on the respective knowledge listed in the Directors' Skill Matrix, we strive to turn the PDCA cycle of management with a sense of speed while receiving fresh opinions from outside directors.

**Appointment of New President**

Mr. Ogawa became the new President in FY2023 after deliberation by the Nomination Advisory Committee and resolution by the Board of Directors. In FY2016, as President and Representative Director, I set forth the major direction of our group, the solution concept "i3-Mechatronics," and promoted the transformation of our business model. What our group needs now is to enhance the effectiveness of "i3-Mechatronics" on a global scale and move toward further growth. Under the direction of "i3-Mechatronics" as General Manager of the Robotics Division, Mr. Ogawa promoted overall optimization and high value-added while sharing his ideas with me. Furthermore, with his experience in global business operations and, above all, his passion for the direction we are headed, I am confident that he is the right person to lead our group in the future.

Under the new management structure, we will always pursue a form of governance that contributes to our group's long-term enhancement of corporate value and realize further growth. I appreciate our stakeholders' continued support.

**Basic Approach to Corporate Governance**

Yaskawa Electric recognizes the importance of corporate ethics based on compliance with laws and regulations and considers it an important issue to enhance corporate value by speeding up management decision-making in response to changing social and economic environments and improving management soundness.

To achieve this, we will build good relationships with our stakeholders, including shareholders, customers, business partners, local communities, and employees. We will also further strengthen our current institutions, including the General Meeting

of Shareholders, Board of Directors, Audit and Supervisory Committee, and Accounting Auditor, while enhancing corporate governance.

For our shareholders and investors, we will strive to disclose information promptly and accurately, and at the same time, enhance management transparency by disclosing a wide range of information.

Yaskawa has established the Yaskawa Electric Corporate Governance Policy, which sets forth its basic views on corporate governance, and discloses it on the website.

**History of Initiatives to Enhance Corporate Governance**

In order to improve the effectiveness of the Board of Directors and other organizations in order to enhance corporate value in a sustainable manner, Yaskawa has developed a governance system by strengthening both offensive and defensive governance based

on Yaskawa's distinctive business situation. We will continue to pursue the best for Yaskawa, enhance management transparency, and further enhance corporate governance.

**History of initiatives to enhance corporate governance**

Fiscal year	FY2012-2014	FY2015-2017	FY2018-2022	
<b>Main measures</b>	<p><b>FY2012</b></p> <ul style="list-style-type: none"> <li>Adoption of executive officer system</li> <li>Number of Directors was reduced to 12 from 20</li> </ul> <p><b>FY2014</b></p> <ul style="list-style-type: none"> <li>Compensation Advisory Committee established</li> </ul>	<p><b>FY2015</b></p> <ul style="list-style-type: none"> <li>Transition to a company with Audit and Supervisory Committee</li> <li>Nomination Advisory Committee established</li> </ul> <p><b>FY2016</b></p> <ul style="list-style-type: none"> <li>Evaluation of the effectiveness of the Board of Directors commenced</li> </ul>	<p><b>FY2018</b></p> <ul style="list-style-type: none"> <li>More than 1/3 of the board of directors are independent outside directors</li> </ul> <p><b>FY2019</b></p> <ul style="list-style-type: none"> <li>Disclosed skill matrix of the board of directors</li> </ul> <p><b>FY2020</b></p> <ul style="list-style-type: none"> <li>Determination of basic policies for executive compensation</li> <li>Established Corporate Governance Policy</li> </ul> <p><b>FY2021</b></p> <ul style="list-style-type: none"> <li>Established Sustainability Policy</li> </ul> <p><b>FY2022</b></p> <ul style="list-style-type: none"> <li>Commenced the Board of Directors' opinion exchange meeting</li> </ul>	
<b>Aim and purpose</b>	<ul style="list-style-type: none"> <li>Faster and more efficient management decision-making and execution</li> <li>Ensuring the appropriateness and transparency of executive compensation</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening of offensive and defensive governance</li> <li>Ensuring transparency and fairness in nomination of director candidates</li> <li>Improving the functions of the Board of Directors to increase corporate value</li> </ul>	<ul style="list-style-type: none"> <li>Improving the independence and objectivity of the Board of Directors</li> <li>Enhancement of information disclosure</li> <li>Contributing to the realization of a sustainable society in addition to improving corporate value</li> <li>Deepening the understanding of the business of outside directors to further improve the effectiveness of the Board of Directors</li> </ul>	
<b>Institution establishment</b>	<b>Company with Board of Corporate Auditors</b>	<b>Company with Audit and Supervisory Committee</b>		
<b>Composition of the Board of Directors</b>	Internal	6	8*	8*
	Independent outside (Female)	1	3*	5* (2)
<b>Composition of Audit and Supervisory Committee (Up to FY2014, data indicated as "Board of Corporate Auditors")</b>	Internal	2	2	2
	Independent outside (Female)	2	3	4 (2)

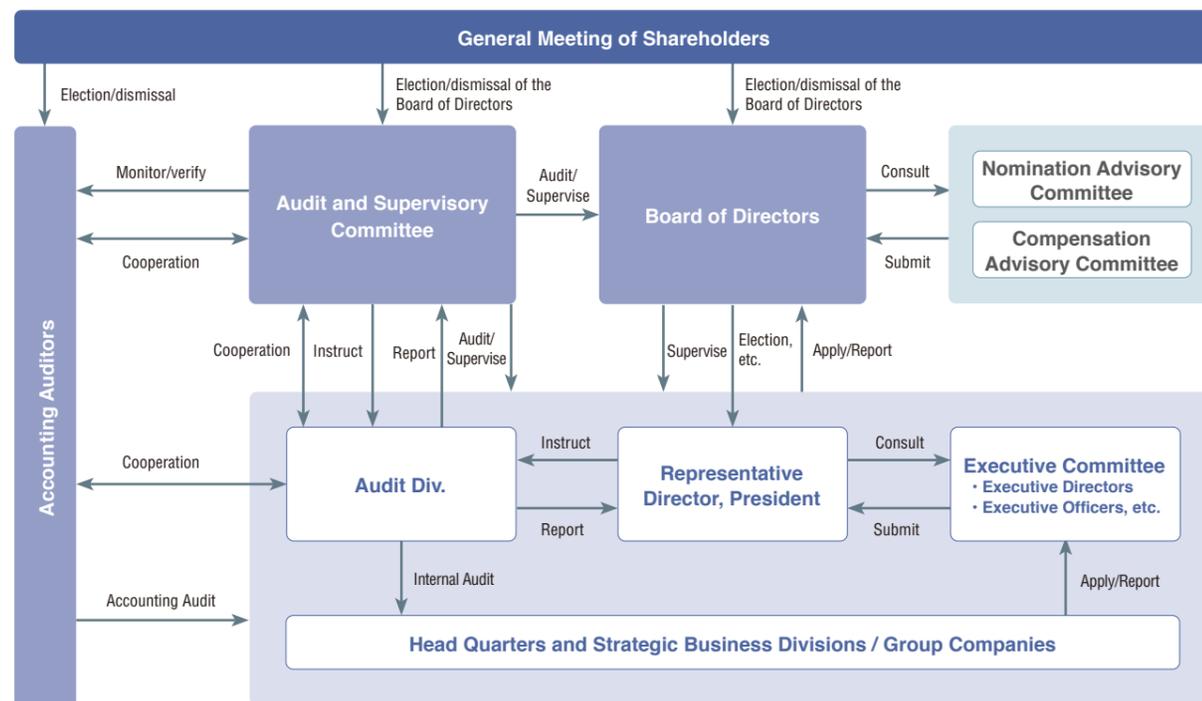
\* Including directors who are members of the Audit and Supervisory Committee.  
Note: The No. of members of the Board of Directors and the Audit and Supervisory Committee are of the latest figure of the corresponding fiscal years on the table.

## Corporate Governance System

Yaskawa Electric has adopted a corporate structure with an Audit and Supervisory Committee in order to further strengthen the oversight function of the Board of Directors over management and corporate governance, as well as to enhance the soundness and efficiency of management. The Company believes that the supervisory function of the Board of Directors will be further enhanced by utilizing the legal functions of Audit and Supervisory Committee Members, such as the ability of Audit and Supervisory Committee Members as directors to exercise voting rights at the Board of Directors on

important matters of the Company, such as the appointment and dismissal of Representative Directors, and the ability to examine the results of the execution of business by Executive Directors and to express opinions at the General Meeting of Shareholders on the appointment, dismissal and remuneration of Executive Directors. In addition, the Company has introduced an executive officer system to separate management decision-making and business execution functions, enhance each function, and speed up business execution.

### Corporate governance structure



### Board of Directors

In addition to the regular meetings of the Board of Directors, the Board of Directors convenes extraordinary meetings as necessary to decide on important matters related to management and matters stipulated by laws and regulations, and to supervise the status of business execution on an ongoing basis.

In deliberations by the Board of Directors, Outside Directors fully understand the current status of Yaskawa based on information submitted or reported by the Internal Audit and Control Division, Corporate administration operations and other functions, and the Accounting Auditor provide advice and proposals based on their respective knowledge, thereby fulfilling appropriate supervisory functions.

\*Specific initiatives are explained in "P. 77 Key Themes and Results of Initiatives at the Board of Directors Meeting" and "P. 78 Evaluating and Improving the Effectiveness of the Board of Directors."

### Audit and Supervisory Committee

The Audit and Supervisory Committee fully understands the current status of Yaskawa Electric based on information reported by the Internal Control Division, the Internal Audit Division, and the head office business divisions, while full-time Audit and Supervisory Committee Members conduct audits based on actual inspections. In addition, the Audit and Supervisory Committee carries out duties in cooperation with the Accounting Auditor, and monitors and verifies the duties of the Accounting Auditor.

### Executive Committee

Among matters decided by the Board of Directors, discussions are held on matters that require prior consultation and important decisions for business execution. Executive Committee meetings are held once a month in principle, but are held on an extraordinary basis if necessary.

### Nomination Advisory Committee

The Nomination Advisory Committee, of which the majority are independent outside directors, has been established under the Board of Directors to ensure the transparency and fairness of the nomination of director candidates, the selection process of representative directors and officers, etc., and to ensure a forum for outside directors to obtain sufficient information and discuss to form opinions on the nomination of director candidates, etc. When submitting proposals regarding the nomination, etc. of director candidates, etc. to the Board of Directors, the details thereof shall be fully reflected upon the report of the Committee.

#### • Contents of discussions and initiatives of FY2022

Nominations of Representative Directors, Directors, and Executive Officers, including the President and Representative Director, were considered and deliberated (held 6 times in total in FY2022)

#### • Procedures for nominating a new president

The Nomination Advisory Committee met several times to explain the concept of selecting a Representative Director, President. After deliberation, the Nomination Advisory Committee received approval.

#### • Policy for initiatives in FY2023 and beyond

We will further ensure transparency and fairness in the selection process by explaining more specifically our approach to the selection of representative directors, directors, and executive officers.

We also rely on the selection policies stipulated in our Corporate Governance Policy for the independence of outside directors. We will consider diversity based on the skills matrix of directors.

### Compensation Advisory Committee

The Compensation Advisory Committee consisting of a majority of independent outside directors is established under the Board of Directors to ensure the appropriateness and transparency of the remuneration of directors (excluding directors who are Audit and Supervisory Committee Members) and executive officers through fair deliberations, and to ensure a forum for outside directors to obtain sufficient information and discuss the remuneration in order to form opinions. When submitting a proposal on remuneration for directors and officers to the Board of Directors, the Company deliberates on the remuneration for directors and officers calculated in accordance with the remuneration rules and other matters necessary for remuneration for directors and officers from the viewpoint of appropriateness, and after receiving a report from this Committee, fully reflects the contents of the proposal.

#### • Contents of discussions and initiatives of FY2022

The Company reviewed and deliberated the appropriateness of the allocation and level of basic remuneration, performance-linked remuneration (single-year remuneration), and stock remuneration (medium- to long-term remuneration) for directors (excluding directors who are Audit and Supervisory Committee Members.) and executive officers (held a total of 3 times in FY2022).

#### • Policies for initiatives in FY 2023 and beyond

With the launch of mid-term business plan "Realize 25," we reviewed stock compensation (medium- to long-term compensation) in light of targets thereof.

## Directors' Compensation

### Basic policy on directors' compensation

With the aim of continuously increasing corporate value and strengthening competitiveness, directors' compensation at Yaskawa is designed to maintain a level of compensation that secures talented human resources and provides incentives for short-term, medium- to long-term performance improvement.

### Basic policy for performance-linked compensation

#### i) Single-year compensation

In order to raise awareness of the continuous improvement of profits as a whole, compensation will be paid according to the profit performance of the previous year.

#### ii) Medium- and long-term compensation

Raise awareness of improving corporate value over the medium to long term and share benefits with stakeholders.

### Composition of directors' compensation

#### Directors (excluding directors who are Audit and Supervisory Committee Members)

##### a. Directors (excluding outside directors)

It consists of basic remuneration, which is fixed remuneration, performance-linked remuneration (single-year remuneration) and stock remuneration (medium- to long-term remuneration), which are linked to business performance. The index setting of this stock remuneration includes ESG targets in addition to business performance.

##### b. Outside Directors

It consists of basic compensation and stock compensation.

#### Directors who are Audit and Supervisory Committee Members

It consists of basic compensation and stock compensation.

### Remuneration to Directors (Excluding Audit and Supervisory Committee Members)

#### 1. Basic compensation

At the 99th Ordinary General Meeting of Shareholders held on June 18, 2015, a resolution was passed to set a fixed limit of 430 million yen or less for the basic remuneration of Directors. Details are as follows.

#### Directors (excluding outside directors)

As directors assume the responsibility of improving corporate value, a certain amount will be paid according to the performance evaluation and position of each Director.

#### Outside Directors

Outside directors are responsible for supervising the execution of duties, so an amount fixed in advance is paid.

#### 2. Performance-linked compensation

The maximum amount of performance-linked remuneration (single-year remuneration) for directors was resolved as follows at the 99 Annual General Meeting of Shareholders held on June 18, 2015.

#### Directors (excluding outside directors)

In order to clarify the linkage with consolidated business results, the amount shall be no more than 1.0% of profit attributable to owners of the parent company of the previous fiscal year of the general meeting of shareholders elected or reappointed. The amount of remuneration for each director is calculated by taking into account the relative results to Yaskawa's business results from the standard deviation based on operating profit rate, operating profit growth rate and ROA of other companies in the same industry.

#### Outside Directors

Performance-linked compensation is not provided.

#### 3. Stock compensation (medium- to long-term compensation)

The Board Benefit Trust (BBT), a stock compensation system for directors, is a stock compensation system linked to the achievement of performance indicators in mid-term business plan. As a result, directors share not only the benefits of rising stock prices but also the risk of falling stock prices with shareholders, thereby encouraging directors to improve the medium- to long-term business performance and their motivation to increase corporate value. At the 105th Annual General Meeting of Shareholders held on May 26, 2021 it was resolved as follows:

#### Directors (excluding outside directors)

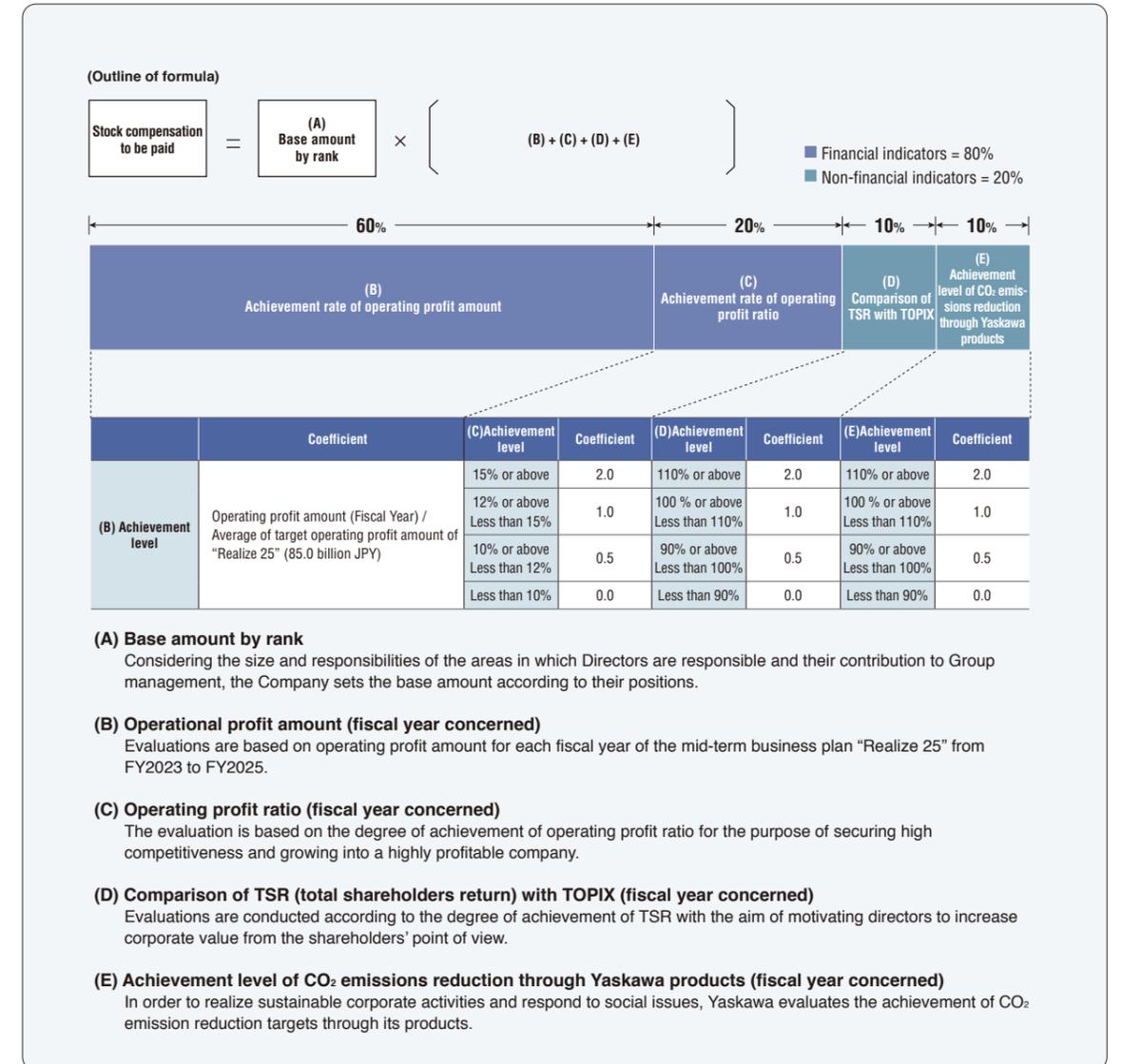
Points are awarded according to the degree of achievement of the targets listed in mid-term business plan (performance-linked).

#### Outside Directors

A predetermined number of points will be awarded based on the assumption that mid-term business plan goals are achieved (not linked to performance).

### Method of calculation of stock compensation to directors (excluding outside directors.)

With the launch of mid-term business plan "Realize 25," the calculation method has been revised, and the evaluation index used as the basis for calculating the stock compensation to directors in FY2023 is as follows.



#### 4. Policy on the proportion of each remuneration

##### Directors (excluding outside directors)

Performance-linked compensation (single-year compensation) and stock compensation (medium- to long-term compensation) are designed so that any improvement in performance is returned as compensation without any upper limit. For this reason, if the performance of the indicators used as the basis for calculation is good, the ratio of basic compensation is relatively small. On the other hand, if the performance of the indicators used as the basis for calculation is poor, the ratio of basic compensation is relatively large.

##### Outside Directors

From the perspective of independence, performance-linked compensation will not be paid, and base compensation as well as non-performance-linked stock compensation only when performance targets are achieved will be paid. The proportion of outside directors' remuneration shall be as follows.

**(a) In the event that stock compensation does not accrue**

Basic compensation: Stock-based compensation = 100%: 0%

**(b) When stock compensation is generated (when stock compensation is maximum)**

Basic compensation: Stock-based compensation = 75%: 25%

## Remuneration of Audit and Supervisory Committee members

### 1. Basic compensation

The maximum amount of basic remuneration for Directors who are the members of the Audit and Supervisory Committee was fixed at a maximum of 150 million yen per year and resolved at the 104th Ordinary General Meeting of Shareholders held on May 27, 2020.

### 2. Stock compensation

The Board Benefit Trust (BBT) for Directors who are Audit and Supervisory Committee Members is a stock compensation paid based on the assumption that mid-term business plan goals are achieved, in light of the fact that Directors who are Audit and Supervisory Committee Members perform monitoring functions such as management performance in order to ensure the achievement of mid-term business plan in addition to the functions of supervising business execution. In order to share value with shareholders, this remuneration is paid as a stock remuneration. The number of shares to be paid to Directors who are Audit and Supervisory Committee Members is not linked to business performance, and the value of the remuneration is linked only to Yaskawa's stock price, thereby eliminating the impact on the functions of supervising business execution of Directors who are Audit and Supervisory Committee Members.

The following resolution was adopted at the 105th Annual General Meeting of Shareholders held on May 26, 2021.

- A predetermined number of points will be awarded on the

assumption that mid-term business plan goals are achieved (not linked to performance).

### Methods of determining directors' compensation

The maximum amount of total remuneration for Directors (excluding directors who are Audit and Supervisory Committee Members. Hereinafter referred to as "Directors.") and Directors who are Audit and Supervisory Committee Members (hereinafter referred to as "Audit and Supervisory Committee Members.") is determined by resolution of the General Meeting of Shareholders. The remuneration of each Director is determined by the Board of Directors after deliberation by the Compensation Advisory Committee on the amount of remuneration calculated in accordance with the Officers' Compensation Regulations, etc. The remuneration of each Audit and Supervisory Committee Member is determined through consultation with the Audit and Supervisory Committee.

In addition, Yaskawa has established the Compensation Advisory Committee, of which the majority are independent outside directors, under the Board of Directors to ensure the appropriateness and transparency of compensation for directors and executive officers through fair deliberation.

With regard to the stock compensation system for Directors and Audit and Supervisory Committee Members, shares are scheduled to be paid to Eligible Directors upon retirement in accordance with the Officers' Share Benefit Rules.

### Total amount of compensation, etc. by Director category, total amount of compensation, etc. by type, and number of applicable directors (FY2022)

Director category	Number of directors	Total amount of compensation (millions of yen)			
		Monetary compensation		Non-monetary compensation	
		Basic compensation	Performance-linked compensation	Stock-based compensation	
Directors (excluding Directors who are Audit and Supervisory Committee Members and Outside Directors)	7	520	266	215	38
Directors who are Audit and Supervisory Committee Members (excluding outside directors)	2	66	61	-	5
Outside Directors	6	95	82	-	13

(Note) The above includes 1 Director (excluding Directors who are Audit and Supervisory Committee) and 1 Director who was an Audit and Supervisory Committee Member retired at the conclusion of the 106th Annual General Shareholders Meeting held on May 26, 2022.

## Key Themes and Results of Initiatives at the Board of Directors Meeting

### Main items of review by the Board of Directors in FY2022

The main items discussed by the Board of Directors in FY2022 are as follows.

- Report and deliberation on the progress of mid-term business plan "Challenge 25 Plus" and the status of business execution of the fiscal year
- Report and deliberation on the status of operation of internal control systems, including the effectiveness and efficiency of business operations, compliance with laws and regulations, information management and crisis management
- Report and deliberation on the status of initiatives to address sustainability issues, including environmental initiatives
- Report and deliberation on the evaluation of the effectiveness of the Board of Directors (a questionnaire survey of all directors conducted by a third-party organization)

### Activities based on the evaluation of the effectiveness of the Board of Directors

In the evaluation of the effectiveness of the Board of Directors, we have received opinions for further activation of constructive discussions on the medium- to long-term management plan and the enhancement of the content of deliberations by the Nomination Advisory Committee.

In formulating mid-term business plan "Realize 25" (From FY2023 to FY 2025), the Board of Directors deliberated multiple times in FY 2022, and since FY2022, important themes have been reported at the newly established Board of Directors' Opinion Exchange Meeting, and we will continue to work to ensure that each Director knows the specific content.

With regard to the content of the deliberations of the Nomination Advisory Committee, we will further ensure the transparency and fairness of the selection process by explaining more specifically our approach to the selection of Representative Directors, Directors, and Executive Officers.

## Roles Expected of Outside Directors, Provision of Information, Etc.

<b>Toshikazu Koike</b>	The Company believes that the rich knowledge, experience, insight, etc., Mr. Toshikazu Koike has gained as a management professional derived from his career as a representative director of a business corporation, etc., will be very useful for the Company, and that he will be able to oversee the management of the Company from an objective viewpoint as an Outside Director who is Member of the Audit and Supervisory Committee.
<b>Kaori Matsuhashi</b>	The Company believes that the rich expertise, experience, insight, etc., Ms. Kaori Matsuhashi has gained as a Certified Public Accountant and Representative Director of a consulting company, will be very useful for the Company, and that she will be able to oversee the management of the Company from an objective viewpoint as an Outside Director who is Member of the Audit and Supervisory Committee.
<b>Keiji Nishio</b>	The Company believes that the rich knowledge, experience, insight, etc., Mr. Keiji Nishio has gained as a management professional derived from his career as a representative director of a business corporation, etc., will be very useful for the Company, and that he will be able to oversee the management of the Company from an objective viewpoint as an Outside Director who is Member of the Audit and Supervisory Committee.
<b>Yaeko Hodaka</b>	Although Ms. Yaeko Hodaka has never been directly involved in corporate management other than as an outside director or outside corporate auditor, the Company believes that the rich expertise, experience, insight, etc. Ms. Yaeko Hodaka has gained as an Attorney, will be very useful for the Company and that she will be able to oversee the management of the Company from an objective viewpoint as an Outside Director who is Member of the Audit and Supervisory Committee.

Each of the above outside directors is not an executive officer of a major business partner or major shareholder of Yaskawa, and has been reported to the Tokyo Stock Exchange as an independent officer designated by the Tokyo Stock Exchange, Inc., based on the judgment that there is no risk of conflicts of interest with general shareholders.

Also, in addition to providing specific explanations on important themes, etc. to each outside director at meetings of the Board of Directors and the Board of

Directors' Opinion Exchange Meetings, etc., the Audit and Supervisory Committee conducts inspections of each business site, etc., thereby contributing to a deeper understanding of the business situation.

Outside directors provide advice, etc. based on their knowledge at meetings of the Board of Directors, etc., and we believe that discussions that pay attention to these issues in advance have led to a higher level of explanation content, thereby fulfilling accountability.

## Evaluation and Improvement of the Effectiveness of the Board of Directors

### Methods of analysis and evaluation

Yaskawa conducts an anonymous "Board Evaluation Questionnaire" once a year to evaluate the effectiveness of the Board of Directors. In addition, an independent questionnaire is conducted by a third-party organization once every three years.

In FY2022, Yaskawa conducted an anonymous questionnaire (hereafter, questionnaire) to all directors, including members of the Audit and Supervisory Committee. This questionnaire consists of evaluation items related to the size, composition, and management of the Board of Directors, the performance of Board functions, management of business plans, support systems for outside directors, and overall management, including management issues and system strengthening.

### Summary of evaluation results

As a result of this questionnaire, more than 80% of the answers were affirmative as a whole. Based on the following points and other positive evaluations, we have judged that the effectiveness of Yaskawa's Board of Directors has been generally ensured.

- Several independent outside directors have been appointed as the composition of the Board of Directors, and an appropriate system has been established for both size and composition.
- An environment has been secured in which independent outside directors can speak freely at the Board of Directors.

On the other hand, the items identified as requiring improvement include the further activation of constructive discussions on the medium- to long-term management plan and the enhancement of the content of deliberations of the Nomination Advisory Committee. We will consider measures to ensure that higher level discussions are held at the Board of Directors, etc.

### Future initiatives

As described above, we evaluate that the Board effectiveness has been secured at present. In order to further improve the effectiveness of the Board of Directors, we have recognized various issues, including further discussions from a medium- to long-term perspective, and will take measures based on this point to further improve the effectiveness.

As described above, analysis, evaluation, and improvement recommendations by a third-party organization are conducted once every 3 years and were implemented in FY2021.

## Messages from Outside Directors

Four outside directors and Audit and Supervisory Committee members commented on the status of corporate governance of the Yaskawa Group. Mr. Koike and Ms. Matsuhashi gave their opinions on the evaluation of the management of the Yaskawa Group, what they found to be issues, and their expectations for the future. Mr. Nishio and Ms. Hodaka, who were newly appointed in May 2023, gave comments on their aspirations for their engagement in the management of Yaskawa.



**Toshikazu Koike**  
Outside Director, Member of the Audit and Supervisory Committee

### Management Evaluation

Based on the concept of i<sup>3</sup>-Mechatronics, I believe it is quite possible for our Motion Control, Robotics, and System Engineering businesses to grow steadily and achieve an operating profit of 100 billion yen. To achieve this, we must continue to transform our manufacturing, technology development, and sales and marketing capabilities to become a resilient global team that can compete and continue to win on a global basis by making the most of YDX.

### Points Perceived as Issues

If Global Team Yaskawa is to continue to grow sustainably, it is natural to place an emphasis on human resources. In addition to the management's succession plan, we need to further strengthen the promotion of next-generation human resources, diversity of human resources, and human resource development. I feel that we should make further efforts to create an environment in which all employees can realize growth while realizing their own potential through increasing transparency on these issues.

### Future Expectations

I have been stationed overseas for 23 years and have nearly 20 years of experience of managing a global company. I will continue to provide opinions on all functions of Yaskawa Electric, including business, business planning, human resources, finance and accounting, global, and IT. I also hope to contribute as much as possible to Yaskawa Electric's eternal prosperity, under my motto of working with a passion that is second to none. I hope to exchange opinions and engage with the members of the Yaskawa Group.



**Kaori Matsuhashi**  
Outside Director, Member of the Audit and Supervisory Committee

### Management Evaluation

I feel that the management is actively working on new things while valuing excellent principles.

In terms of governance, I feel that the opinions and requests from outside directors are reflected in the management of the Board of Directors. Important issues are shared with outside directors from the examination stage before decisions are made, and the foundation for discussions focusing on broad issues such as medium- to long-term market and technology trends, investment policies, and geopolitical risks is now in place. I believe it is important to create a system that enables us to discuss these issues more thoroughly in the future.

### Points Perceived as Issues

This fiscal year is the first year of our mid-term business plan "Realize 25." Our company's business is expanding globally, and I believe that our management agenda is to steadily improve the added value of our i<sup>3</sup>-Mechatronics business activities and strengthen our production and procurement systems, leading to business development. In terms of diversity and inclusion, the ratio of female managers in the Group as a whole is 13%, which is still in development. However, I believe that the challenge is to create an inclusive environment by emphasizing the qualitative changes brought about by diverse values through developing human resources.

### Future Expectations

I specialize in organizational management, finance, and accounting, but I prioritize understanding the field conditions that produce products and services in order to make discussions at board meetings effective. Last year, I visited production sites, mainly domestic sites, and held discussions with business managers. Going forward, I will continue to exercise my supervisory function by asking questions from an objective point of view until being satisfied and contribute to the realization of our company's excellent philosophy of "Contribute to the development of society and the welfare of mankind through the execution of business" as an outside director.



**Keiji Nishio**  
Outside Director, Member of the Audit and Supervisory Committee

### Aspirations on Appointment

From an independent and objective position as an outside director, I will oversee management processes and business execution with ethics, proactively ask questions to the management team and engage in constructive exchanges of views so as to support the medium- to long-term growth and enhancement of corporate value of the Yaskawa Group. In addition, as an Audit and Supervisory Committee Member, I will cooperate with the internal audit department and audit the execution of duties by directors while taking advantage of opportunities for communication with various departments during the audit. I have been engaged in business-to-customer operations for a long time, and I would like to contribute to the improvement of the effectiveness of the Board of Directors by valuing this unique perspective and devoting myself to collecting various information such as trends in the FA industry, progress in the company's business performance, and changes in the industrial and market structure, as well as self-improvement.

In order to achieve the goals of the new mid-term business plan "Realize 25," I will make every effort to realize the Yaskawa Group, in which each officer and employee firmly share the corporate motto of "a technology-driven company," as well as the significance of existence and values that will not waver even as times change, and which are reflected concretely in each person's daily actions.



**Yaeko Hodaka**  
Outside Director, Member of the Audit and Supervisory Committee

### Aspirations on Appointment

At a time when the manufacturing industry is trying to shift from "product-selling to digital data solution," I feel that our company is one step ahead of the manufacturing industry in its strategy of scrutinizing customer needs, deeply understanding what the customers' destination is, and providing goods to realize it. On the other hand, as an Audit and Supervisory Committee member with a legal background, I believe that there are several things that I should focus on. One is the supply chain. Our company deals with products that contain cutting-edge technology, so it needs to pay close attention to increasingly complex trade regulations. In addition, we cannot afford to overlook whether the global supply chain contains factors that violate human rights. Furthermore, as our company seeks to accelerate its global expansion, particularly in the United States, effective control of overseas bases, including subsidiaries, which Japanese companies are generally very inept at, is an important issue. Finally, while the collection and analysis of product data is essential to the services our company provides, in order to do so globally, it is necessary to create a detailed system that does not conflict with national regulations. These are just a few examples, but I hope that I will be able to absorb information on various occasions and contribute to the development of the Yaskawa Group.



**Hiroshi Ogasawara**  
 (Born on September 19, 1955)

Representative Director, Chairman of the Board  
 1979 Joined the Company  
 2023 Representative Director, Chairman of the Board (incumbent)  
 No. of shares of the Company held 52,155



**Masahiro Ogawa**  
 (Born on August 25, 1964)

Representative Director, President  
 1987 Joined the Company  
 2023 Representative Director, President;  
 In charge of Human Resources Development;  
 In charge of ICT Strategy;  
 General Manager, Corporate Technology Div. (incumbent)  
 No. of shares of the Company held 15,967



**Shuji Murakami**  
 (Born on April 21, 1959)

Representative Director, Senior Managing Executive Officer  
 1982 Joined the Company  
 2020 Representative Director, Senior Managing Executive Officer,  
 In charge of CSR; In charge of Administration;  
 General Manager, Corporate Planning & Finance Div. (incumbent)  
 No. of shares of the Company held 38,909



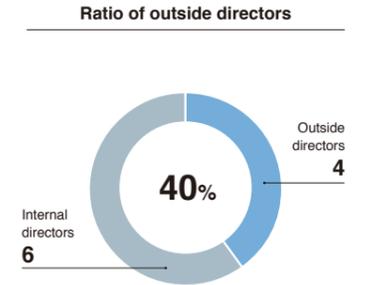
**Toshikazu Koike**  
 (Born on October 14, 1955)

Outside Director, Member of the Audit and Supervisory Committee  
 2021 Outside Director, Member of the Audit and Supervisory Committee of the Company (incumbent)  
 No. of shares of the Company held 1,525



**Kaori Matsuhashi**  
 (Born on June 7, 1969)

Outside Director, Member of the Audit and Supervisory Committee  
 2022 Outside Director, Member of the Audit and Supervisory Committee of the Company (incumbent)  
 No. of shares of the Company held 0



**Yasuhiko Morikawa**  
 (Born on June 11, 1962)

Director, Senior Executive Officer  
 2015 Joined the Company, Associate Director  
 2022 Director, Senior Executive Officer;  
 In charge of Compliance;  
 General Manager, General Affairs & Risk Management Div. (incumbent)  
 No. of shares of the Company held 12,869



**Yuji Nakayama**  
 (Born on May 17, 1960)

Director and Member of the Audit and Supervisory Committee  
 1983 Joined the Company  
 2019 Director and Member of the Audit and Supervisory Committee (Full-time, incumbent)  
 No. of shares of the Company held 30,032



**Takeshi Ikuyama**  
 (Born on July 29, 1963)

Director and Member of the Audit and Supervisory Committee  
 1986 Joined the Company  
 2023 Director and Member of the Audit and Supervisory Committee (Full-time, incumbent)  
 No. of shares of the Company held 1,734



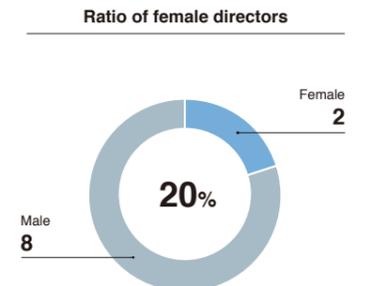
**Keiji Nishio**  
 (Born on February 19, 1959)

Outside Director, Member of the Audit and Supervisory Committee  
 2023 Outside Director, Member of the Audit and Supervisory Committee of the Company (incumbent)  
 No. of shares of the Company held 0



**Yaeko Hodaka**  
 (Born on March 20, 1966)

Outside Director, Member of the Audit and Supervisory Committee  
 2023 Outside Director, Member of the Audit and Supervisory Committee of the Company (incumbent)  
 No. of shares of the Company held 0



**Composition and Skill Matrix of the Board of Directors, Audit and Supervisory Committee, and Advisory Committees**

Yaskawa's Board of Directors is composed of people with advanced knowledge and experience in various fields related to company management. In addition, we have defined the areas of particular importance in company management as follows and expect each director to fully demonstrate his or her abilities.

In addition to the independence criteria set forth by the Financial Instruments Exchange, Yaskawa selects independent outside directors who meet its own criteria.

\*Please refer to the Notice of Convocation of the Ordinary General Meeting of Shareholders for the reasons for the election of each director.  
[https://www.yaskawa-global.com/wp-content/uploads/2023/04/107\\_agm\\_en.pdf](https://www.yaskawa-global.com/wp-content/uploads/2023/04/107_agm_en.pdf)

\*Please refer to Yaskawa website for Yaskawa's independence standards.  
<https://www.yaskawa-global.com/company/csr/governance/structure>

Name	Age	Gender	Attributes	Structure				Field of capability that Yaskawa expect each director to demonstrate						
				Board of Directors	Audit and Supervisory Committee	Nomination Advisory Committee	Remuneration Advisory Committee	Corporate management/Management strategy	Corporate governance	Finance/Accounting	Legal	Sales/Marketing	Manufacturing/R&D and IT	Global
Hiroshi Ogasawara	67	Male		◎		○		●	●	●		●	●	●
Masahiro Ogawa	58	Male		○		◎	○	●	●			●	●	●
Shuji Murakami	64	Male		○			○	●	●	●	●			●
Yasuhiko Morikawa	60	Male		○				●	●	●	●			●
Yuji Nakayama	63	Male	Non-executive	○	◎			●	●	●				●
Takeshi Ikuyama	59	Male	Non-executive	○	○			●	●					●
Toshikazu Koike	67	Male	Outside Independent	○	○	○	◎	●	●			●		●
Kaori Matsuhashi	53	Female	Outside Independent	○	○	○	○	●	●	●				●
Keiji Nishio	64	Male	Outside Independent	○	○	○		●	●			●	●	●
Yaeko Hodaka	57	Female	Outside Independent	○	○		○	●	●			●		●

♂ : Male ♀ : Female

Outside: Outside Director as provided in Article 2-15 of the Companies Act.  
 Independent: Designated Independent Director as stipulated by the Tokyo Stock Exchange.  
 Non-executive: Non-executive internal director

◎ Chairperson ○ Member

Note: The above table does not represent the full knowledge of each director. Age is as of the 107th general meeting of shareholders held on May 24, 2023.

**Senior Executive Officers**



**Michael Stephen Knapik**  
 Regional Manager, the Americas  
 Chairman & CEO, Yaskawa America, Inc.



**Junichi Nakano**  
 Branch Office General Manager, Tokyo Branch  
 General Manager, Global Marketing Div.  
 Global Market Manager, Secondary Battery Market, Global Marketing Div.  
 General Manager of Import & Export Administration Div.  
 In charge of global compliance, General Affairs & Risk Management Div.  
 In charge of Tokyo, General Affairs & Risk Management Div.



**Nobuaki Jinnouchi**  
 Regional Manager, Asia  
 President & CEO, Yaskawa Asia Pacific Pte. Ltd.



**Kenji Ueyama**  
 General Manager, Motion Control Div.



**Bruno Schnekenburger**  
 Regional Manager, Europe  
 Chairman Yaskawa Europe Holding



**Tatsuya Yamada**  
 General Manager, Drives Div.  
 General Manager, Environmental Energy Business, Drives Div.



**Hiroshi Takata**  
 General Manager, Corporate Sales & Marketing Div.  
 Department Manager, CRM Strategy Promotion Dept., Corporate Sales & Marketing Div.



**Ayumi Hayashida**  
 General Manager, Corporate Branding Div.  
 General Manager, Corporate Communications Dept., Corporate Branding Div.



**Manabu Okahisa**  
 Regional Manager, China  
 General Manager, Robotics Div.  
 Department Manager, Business Planning Dept., Robotics Div.

**Executive Officers**



**Masahiko Okura**  
 General Manager, Production Management & Operations Div.



**Takenori Otsuka**  
 General Manager, Quality & Service Div.



**Michiaki Higuchi**  
 General Manager, Procurement Div.



**Shunrin Mizutani**  
 Director, President, Yaskawa Tsusho (Shanghai) Co., Ltd.



**Yasushi Ichiki**  
 Deputy General Manager, Corporate Planning & Finance Div.  
 In charge of ICT strategy promotion, ICT Strategy Promotion Div.  
 Department Manager, Corporate Planning Dept., Corporate Planning & Finance Div.  
 In charge of digital management promotion, Corporate Planning & Finance Div.



**Albert Shiina**  
 President, Yaskawa Electric Korea Corp.



**Shoichiro Shimoike**  
 Manager, ICT Strategy Promotion Div.



**Yasuo Adachi**  
 Director, President, Yaskawa Electric (China) Co., Ltd.

Japanese GAAP						
(Fiscal year)	2012	2013	2014	2015	2016	2017 <sup>*3</sup>
Net sales	310,383	363,570	400,153	411,260	394,883	448,523
Gross profit	82,108	108,139	126,890	134,147	124,018	154,174
Operating profit	13,070	25,702	31,532	36,730	30,409	54,126
Profit before income taxes	12,125	25,717	34,413	35,202	29,910	53,556
Profit attributable to owners of parent	6,800	16,964	24,819	22,365	20,397	39,749
<b>Business Segment Information<sup>**2</sup></b>						
	Net sales	144,333	162,346	188,116	187,548	212,095
Motion Control	Operating profit	3,248	16,444	21,748	22,413	41,729
	Operating profit ratio (%)	2.3	10.1	11.6	12.0	19.7
Robotics	Net sales	110,223	122,543	135,956	154,068	163,379
	Operating profit	8,365	9,511	10,558	15,304	17,761
	Operating profit ratio (%)	7.6	7.8	7.8	9.9	10.9
System Engineering	Net sales	37,263	35,327	40,980	43,053	52,934
	Operating profit	1,504	-5	-768	-760	-591
	Operating profit ratio (%)	4.0	-0.0	-1.9	-1.8	-7.2
<b>Sales by Destination<sup>*4</sup></b>						
Japan	143,456	150,101	144,246	135,495	134,205	133,896
The Americas	51,113	58,481	72,616	85,088	74,691	83,078
Europe	32,047	42,499	46,921	52,011	50,736	60,879
China	48,555	67,165	85,017	81,938	81,246	103,313
Asia except China	32,752	41,430	47,761	52,355	49,798	63,397
Other	2,456	3,892	3,590	4,370	4,205	3,957
Overseas sales ratio (%)	53.8	58.7	64.0	67.1	66.0	70.1
<b>Cash Flow</b>						
Cash flows from operating activities	24,640	23,972	29,023	31,954	33,752	46,054
Cash flows from investing activities	-18,058	-16,942	-27,874	-22,421	-18,936	-18,852
Free cash flows	6,582	7,029	1,149	9,533	14,816	27,202
Cash flows from financing activities	-9,053	-5,983	-1,471	-2,601	-16,453	-14,820
Cash and cash equivalents at end of period	19,389	22,992	24,347	31,656	29,735	42,213
<b>Per Share Information</b>						
Earning (yen)	27.03	67.42	98.45	84.71	76.60	149.35
Dividends (yen)	10.00	12.00	20.00	20.00	20.00	40.00
<b>End of the Fiscal Year</b>						
Total assets	302,518	340,506	388,205	373,533	387,512	441,249
Interest-bearing debt	54,684	55,528	52,430	48,426	36,765	32,247
Shareholders' equity	112,218	134,076	171,388	181,281	198,513	235,865
<b>Management and Financial Indicators</b>						
Operating profit ratio (%)	4.2	7.1	7.9	8.9	7.7	12.1
ROE: Return on equity (%)	6.4	13.8	16.3	12.8	10.7	18.3
Shareholders' equity ratio (%)	37.1	39.4	44.1	48.5	51.2	53.5
Debt-to-equity ratio (times)	0.49	0.41	0.31	0.27	0.19	0.14
Dividend payout ratio (%)	37.0	17.8	20.3	23.6	26.1	26.8
<b>Exchange Rate</b>						
U.S. dollar (yen)	81.9	99.6	108.2	120.8	108.4	111.5
Euro (yen)	105.7	132.7	139.7	133.0	119.2	128.8

\*1 Starting FY2013, reportable segments changed to the following 3 segments: Motion Control, Robotics, and System Engineering. There have also been partial changes in the division of businesses within these segments. Figures and profit ratios of each segment for the period up until FY2012 are based on figures before the change was implemented. The figures for former Information Technologies segment and Other segment are omitted. Revisions were made to the division of businesses segments starting FY2017. The PV inverter business, which was previously included in Motion Control, is included in System Engineering. Figures and profit ratios of each segment for FY2016 reflect this change. The change is not applied to figures and profit ratios for the period up until FY2015.

IFRS					(million JPY)
2018	2019	2020	2021	2022	(Fiscal year)
474,638	410,957	389,712	479,082	555,955	Revenue
156,353	124,496	116,370	168,644	192,006	Gross profit
53,098	24,198	27,180	52,860	68,301	Operating profit
55,051	24,642	27,172	55,378	71,134	Profit before tax
42,524	15,572	18,927	38,354	51,783	Profit attributable to owners of parent
<b>Business Segment Information<sup>**2</sup></b>					
213,260	180,446	176,014	227,260	252,126	Revenue
34,697	20,554	24,576	38,161	36,193	Operating profit
16.3	11.4	14.0	16.8	14.4	Operating profit ratio (%)
177,995	152,170	139,494	178,670	223,829	Revenue
17,986	6,503	6,907	17,248	26,126	Operating profit
10.1	4.3	5.0	9.7	11.7	Operating profit ratio (%)
51,627	55,535	50,763	52,265	51,111	Revenue
-770	469	-1,030	2,126	2,574	Operating profit
-1.5	0.8	-2.0	4.1	5.0	Operating profit ratio (%)
<b>Revenue by Location<sup>*4</sup></b>					
154,539	151,481	135,908	150,190	162,405	Japan
84,908	73,906	58,928	80,705	116,956	The Americas
70,436	61,275	54,822	73,726	81,393	EMEA
103,404	79,974	97,938	126,055	135,860	China
60,914	43,892	41,818	48,405	59,339	Asia except China
435	428	296	—	—	Other
67.4	63.1	65.1	68.7	70.8	Overseas revenue ratio (%)
<b>Cash Flow</b>					
34,347	21,480	39,602	49,233	-2,209	Net cash provided by operating activities
-27,111	-20,645	-9,601	-24,165	-19,694	Net cash used in investing activities
7,236	835	30,000	25,067	-21,904	Free cash flows
-10,268	491	-20,284	-22,475	7,197	Net cash provided by (used in) financing activities
39,289	40,307	50,953	55,151	42,274	Cash and cash equivalents at end of period
<b>Per Share Information</b>					
161.00	59.42	72.41	146.72	198.07	Earnings per share (yen)
52.00	52.00	24.00	52.00	64.00	Dividends per share (yen)
<b>End of the Fiscal Year</b>					
463,965	450,127	487,428	559,038	653,132	Total assets
55,415	81,578	76,543	68,046	99,565	Interest-bearing debt
243,967	228,362	246,266	291,234	347,499	Equity attributable to owners of parent
<b>Management and Financial Indicators</b>					
11.2	5.9	7.0	11.0	12.3	Operating profit ratio (%)
17.9	6.6	8.0	14.3	16.2	ROE: Return on equity (%)
52.6	50.7	50.5	52.1	53.2	Ratio of equity attributable to owners of parent to total assets (%)
0.22	0.36	0.31	0.23	0.29	Debt-to-equity ratio (times)
32.3	87.5	33.1	35.4	32.3	Dividend payout ratio (%)
<b>Average Exchange Rate</b>					
110.5	109.0	106.0	111.5	134.1	U.S. dollar (yen)
128.9	121.4	122.8	130.4	139.8	Euro (yen)

\*2 From FY2020, high-pressure AC drive systems were included in the Systems Engineering segment, but are now included in the Motion Control segment. Amounts and operating profit ratios for each segment are presented on the basis after the change of segments for FY2019 and before the change of segments for the period up to FY2018.

\*3 The Company changed its accounting period starting FY2017 from March 20 to the last day of February. As a transitional year for this change, FY2017 was from March 21, 2017 to February 28, 2018.

\*4 Regional revenue is disclosed by destination up to FY2020, and by location since FY2021.

IR Activities

Yaskawa believes it is important to promote constructive dialogue with shareholders and investors in order to achieve sustainable growth and increase corporate value over the medium to long term.

In addition to enhancing information disclosure and opportunities for dialogue with our stakeholders, including institutional investors and analysts, we appropriately report to the management the opinions and requests of our stakeholders, and use them in discussions aimed at improving corporate value.

External Evaluation of IR Activities

Overall IR activities

Japan Investor Relations Association

IR Award 2022  
"Most Liked!" IR Award



Institutional Investor

The 2023 All-Japan Executive Team Ranking  
2nd in Engineering & Machinery sector  
3rd in Best CEO  
1st in Best CFO  
1st in Best IR Professional  
3rd in Overall best IR Team  
2nd in Overall best IR Program

Inclusion in ESG Index

Yaskawa was included in the following indices as of July 2023.

- MSCI Japan ESG Select Leaders Index\*
- MSCI Japan Empowering Women Select Index (WIN)\*
- FTSE4Good Index Series
- FTSE Blossom Japan Index
- FTSE Blossom Japan Sector Relative Index
- S&P/JPX Carbon Efficient Index
- Morningstar Japan ex-REIT Gender Diversity Tilt Index



FTSE Blossom Japan Index



FTSE Blossom Japan Sector Relative Index

2023 CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX

2023 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)



IR website

Daiwa Investor Relations Co., Ltd.

2022 Internet IR Awards  
Excellence Award

Nikko IR Corporation

Ranking of all listed company websites in FY 2022  
Best site (General award)

Broadband Security Co., Ltd.

Gomez IR Site Ranking 2022  
Excellent Company: Bronze Prize

Corporate Information (As of February 28, 2023)

Corporate name:	YASKAWA Electric Corporation
Head office:	2-1 Kurosakishiroishi, Yahatanishi-ku, Kitakyushu 806-0004, Japan
Founded:	July 16, 1915
Share capital:	30,562 million yen

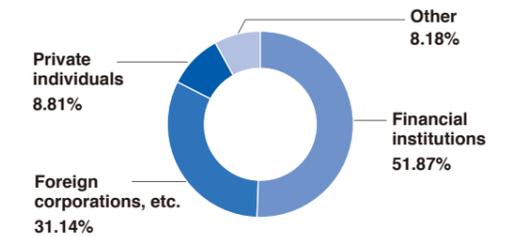
Employees:	13,094 Consolidated
Number of consolidated subsidiaries:	62 companies
Number of affiliates accounted for by the equity method:	8 companies

Stock and Shareholder Information (As of February 28, 2023)

Stock Information

Securities code:	6506 (Japan)
Business year:	March 1 to the last day of February of the following year
Record date for dividend payout:	Last day of February and August 31 of each year
Month of the Ordinary General Meeting of Shareholders:	May
Number of shares outstanding:	266,690,497
Number of shares circulating (unit):	1,594,820 units
Ratio of shares circulating:	59.80%
Stock exchange listings:	Tokyo (Prime market), Fukuoka
Share unit:	100 shares
Number of shareholders:	41,345

Share Distribution by Shareholder Type

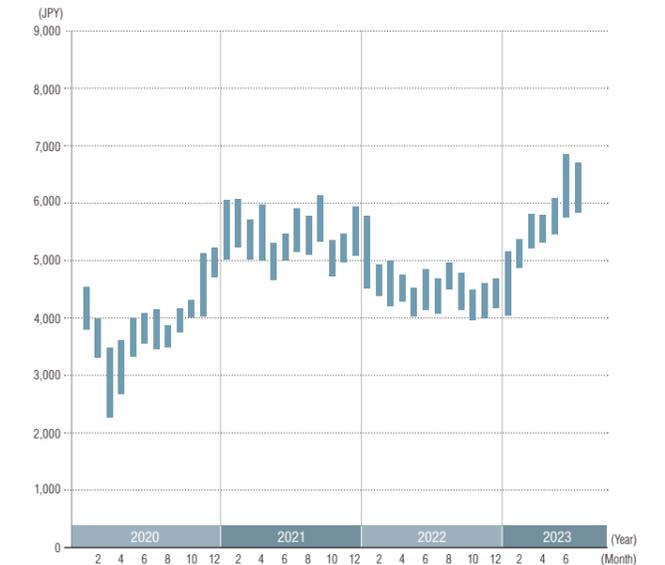


Major Shareholders

Major shareholders (Top 10 shareholders)	Number of shares (Thousands)	Share holding ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	52,012	19.81%
Custody Bank of Japan, Ltd. (Trust Account)	24,956	9.50%
THE BANK OF NEW YORK 133969	12,300	4.68%
Mizuho Bank, Ltd. (MHBK)	8,100	3.09%
Custody Bank of Japan, Ltd. (Sumitomo Mitsui Trust Bank, Limited Employee Retirement Benefit Trust Account)	7,439	2.83%
Meiji Yasuda Life Insurance Company	7,230	2.75%
Custody Bank of Japan, Ltd. (Sumitomo Mitsui Trust Bank, Limited ReTrust Account, The Bank of Fukuoka, Ltd. Employee Retirement Benefit Trust Account)	5,100	1.94%
STATE STREET BANK WEST CLIENT – TREATY 505234	4,613	1.76%
The Dai-ichi Life Insurance Company, Ltd.	4,199	1.60%
SSBTC CLIENT OMNIBUS ACCOUNT	4,119	1.57%

Note: Treasury stock (4,122,926 shares) is deducted in the calculation of the shareholding ratio.

Company Share Price (From January 2020 to July 2023)



Note: The prices displayed are the monthly high and low prices traded at Tokyo Stock Exchange.

Stock Price Indicators and Data (As of the end of FY)

	2019	2020	2021	2022
Price Earnings Ratio (PER) (Times)	56.97	73.47	31.15	27.06
Price Book-value Ratio (PBR) (Times)	3.87	5.65	4.10	4.03
Market capitalization at the end of the period (million JPY)	902,747	1,418,793	1,218,776	1,429,461

\* THE INCLUSION OF YASKAWA ELECTRIC CORPORATION IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF YASKAWA ELECTRIC CORPORATION BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

# YASKAWA

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