Environmental Initiatives

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*1, 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_2 emissions by Yaskawa products by more than 100 times the amount of CO_2 emissions produced by Yaskawa Group (CCE 100) by 2025, and are promoting environmental management.

*1 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

	Mid-term Plan Targets for FY2025	Progress in FY2023	Self-evaluation
Green Processes	The Group's CO_2 emission reduction rate 30% (Compared to FY2018)	18.6%	◎
	CO_2-free electric power rate 75% (Yaskawa Electric)	58.3%	○
	Reduce volume of waste discharged by the Group FY2018 results (3,986 tons) or less	3,179 tons (Compared to FY2018: 80%)	○
	Proper water management Reduce volume of water consumed by the Yaskawa Electric Reduce by 1% compared to FY2022 results (169,000 m^3)	166,000 m^3 (Compared to FY2018: 98.3%)	○
Green Products	Contribution to reducing CO_2 emissions through products 120.00 million tons (Cumulative since FY2016)	104.41 million tons (Cumulative since FY2016)	○
	100% compliance with the RoHS Directive	100% compliance with the RoHS Directive	○
Management	Increase in the number of companies covered under EMS in the Yaskawa Group Environmental impact load ratio: 99% or greater	Environmental impact load ratio: 98.8%	△

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

Progress in FY2023

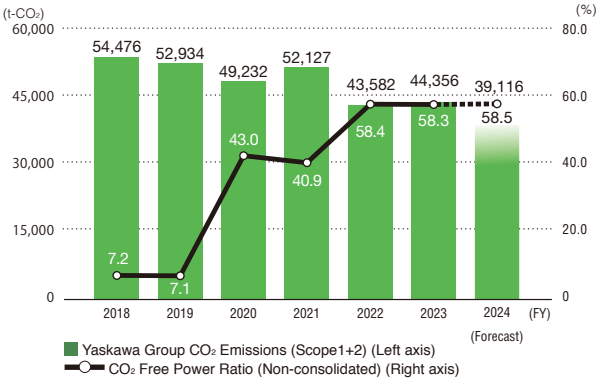
In FY2023, we achieved our environmental targets. In the green process, we focused on reducing CO_2 emissions. We installed solar power generation equipment at Robot Plant No. 4 at Yahatanishi site in Japan, and at our Yaskawa Europe Headquarters and Shenyang Plant in China. At the same time, we worked to reduce energy consumption through stable operation of solar power generation equipment, investment in energy-saving equipment, and individual energy-saving activities. As a result, Yaskawa Electric alone achieved a CO_2-free electricity ratio of approximately 58.3% in FY2023, contributing significantly to the reduction of CO_2 emissions by the Group. As for the Group's EMS*2 activities, we have improved the promotion system of overseas group companies, and the scope of control has become 98.8% in terms of environmental impact ratio. Although the scope of control at overseas sites has expanded, the energy consumption at sites under control has been reduced, and the environmental impact ratio has become relatively low. In the current mid-term plan, we plan to increase the impact ratio to 99% or more, including the expansion of sites. At the same time, we will consider reviewing management indicators in the long-term plan from FY2026.

The Group's greenhouse gas reduction target*3 has been certified by the SBT Initiative*4 as a scientifically based target to keep the global average temperature rise below 1.5˚C compared to pre-industrial levels.

As a new initiative in FY2023, we are strengthening our approach to the supply chain by introducing energy-saving examples using our products to customers who visit us and by cooperating with partner factories in their efforts to reduce CO_2 emissions.

To reduce water consumption, since most of our water consumption is for domestic use, we are working to conserve water on a daily basis and actively promoting the introduction of water-saving equipment when constructing new buildings. As for waste, we have started efforts to reduce waste plastic and expect results in FY2024.

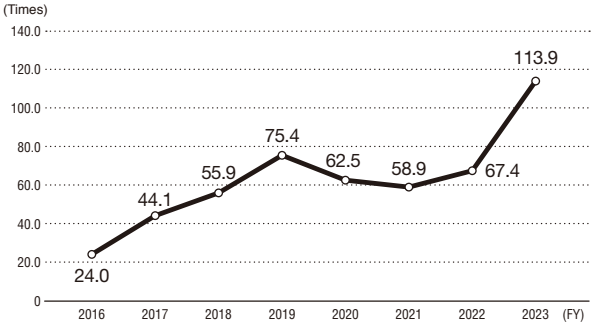
Trends in Group CO_2 Emissions and CO_2 Free Power Ratio (Non-consolidated)



As for CCE100, our unique indicator for environmental management, we achieved the target of 100 times with the result of 113.9 times two years ahead of schedule. In addition to significantly meeting the Group's CO_2 emission reduction target, we also achieved the CCE100 target thanks to the expansion of the boundary resulting from the establishment of a system that enables us to aggregate the CO_2 reduction contribution of the Drives business on a global basis and strong sales of the AC drive products.

*2 Environmental Management System
*3 Reduce CO_2 emissions from our group's business activities (Scope 1+ Scope 2) by 51% in 2030 compared to 2018. Reduce CO_2 emissions upstream and downstream of our supply chain (Scope 3) by 15% in 2030 compared to 2020.
*4 Science Based Targets initiative: An international initiative that certifies that companies' CO_2 reduction targets are consistent with scientific evidence.

Trends in CCE100 (CO_2 emission reduction contribution through Yaskawa products/CO_2 emission from Yaskawa group)



Future Initiatives

Aiming to achieve carbon neutrality by 2050, we will promote environmental management throughout the Group and accelerate the reduction of environmental impact in the Group's production activities based on a global framework in cooperation with plants in Japan, Europe, the United States, and China.

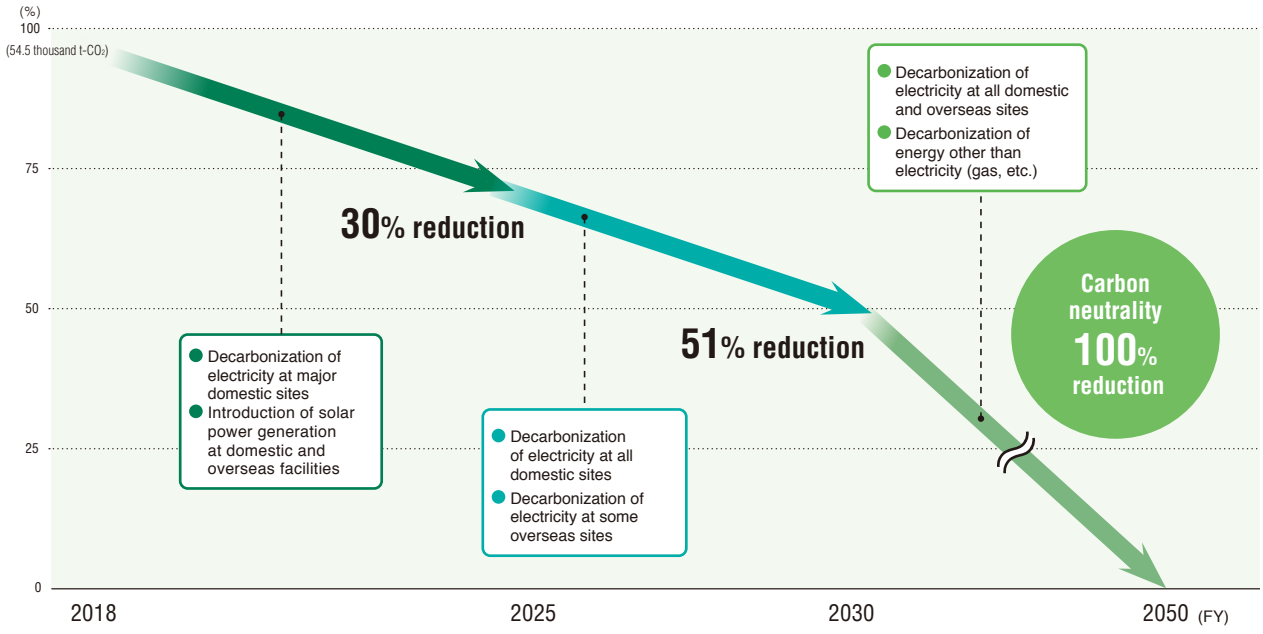
In addition to thoroughly reducing energy consumption through measures such as switching to LED lighting, upgrading air conditioning equipment, and improving the efficiency of production facilities, we will promote group-wide decarbonization by installing photovoltaic power generation panels at plants and offices, including overseas Group companies, and introducing CO_2-free electricity. At the same time, as an approach to the supply chain, we will continue to provide customers with examples of energy conservation using our products and support the efforts of cooperating factories to reduce CO_2 emissions.

Under the current mid-term plan, in addition to conventional measures, we will work even more proactively on resource conservation activities, such as reducing plastic waste and water consumption.

In addition to increasing the ratio of Green Products to Group revenue, we will accelerate efforts to increase the environmental contribution of our products and reduce their environmental impact by ensuring the management of chemical substances contained in our products in compliance with the European RoHS Directive and REACH regulations.

Also, based on the results of information disclosure based on the TCFD recommendations implemented in May 2021, we will respond to the risks and opportunities identified, and will further disclose information based on the opinions of stakeholders.

Milestones for achieving carbon neutrality by FY2050



Environmental Initiatives

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_2 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 “i3-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.

Extreme weather

Rising prices of materials and resources

Equipment for renewable power generation

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.

Extreme weather

Business impacts related to risk and opportunity factors

Risk/ Opportunity	Transition/ Physical	Factor	Impact	Evaluation*7
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
	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.	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*1, SDS*2, STEPS*3
· Used mainly to analyze physical risks: IPCC*4, RCP2.6*5, RCP8.5*6

*1 International Energy Agency
*2 Sustainable development scenario
*3 Stated policies scenario
*4 Intergovernmental panel on climate change
*5 Scenario in which the average temperature of the world rises about 2°C over the average temperature before the industrial revolution
*6 Scenario in which the average temperature of the world rises about 4°C over the average temperature before the industrial revolution
*7 "Minor," "Moderate," and "Serious" are assumed to be manageable within the scope of income for the period. "Serious" is 50% or more, "Moderate" is 10% or more, and "Minor" is less than 10% of operating profit, which provide quantitative standards.

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 companywide 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_2 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_2 emissions by 51% in 2030 compared to 2018. In addition, the company has also set a target of reducing its 2030 CO_2 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_2 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_2 emissions of the world through its products and make the reduction more than 100 times the amount of CO_2 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_2) 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

Future Initiatives

With the dissolution of TCFD in October 2023, the publication of IFRS S2*8, and the EU' s efforts to address CSRD*9, new disclosure standards are beginning to be implemented, and it is becoming necessary to respond to them. We will prepare for disclosure in line with trends in disclosure standards.

*8 Disclosure standards for "climate-related disclosures" published by the IFRS Foundation
*9 Corporate Sustainability Reporting Directive: The European Commission's Corporate Sustainability Reporting Directive

Roundtable: Evolution of Technology and Product Development at Yaskawa Technology Center

Toward the development of products that realize “benefits (improvement and evolution)” for industry and society

In September 2021, the Yaskawa Technology Center (Hereinafter, YTC) started operating with the aim of increasing development efficiency and creating synergies by consolidating development bases that had been dispersed by product and technology field and various data related to engineers and technology development. Since then, efforts have been made to improve the development environment from various aspects, and activities transcend the boundaries between departments to create products and technologies that realize customers’ “benefits (improvement and evolution).” We interviewed 5 engineers working at YTC about how collaboration between different technology fields has changed the way they develop and their aspirations for the future.

Engineers

Yusuke Tanaka
ASIC & Communication Fundamental R&D Management Dept.
Corporate Technology Div.

Shingo Fukumaru
Technology & Engineering Dept.
Drives Div.

Keisuke Takeda
Multi-Axis Servo Amplifier Development
Servo Drives Development Dept.
Motion Control Div.

Hiroshi Takada
Motor Development
Servo Drives Development Dept.
Motion Control Div.

Shuhei Sakima
Motor & Actuator Fundamental R&D Management Dept.
Corporate Technology Div.

Q What are the cross-divisional activities at YTC?

Tanaka At the beginning, activities were divided into technical areas, not product areas. I worked on control circuit technology, Mr. Fukumaru worked on drive control technology, Mr. Sakima worked on motor technology, Mr. Takada worked on encoders, and Mr. Takeda worked on structures. Until FY2022, discussions were held on “technologies that will be needed in the future” and “standardization of work” in each technical area.

Since FY2023, we have been working on the theme of “what technologies are needed for future products?” For example, in the case of servos, we conduct surveys of our target markets, such as semiconductors and electronic components, and discuss and examine the technologies that will be needed in the future and the products that will be equipped with them.

Fukumaru In the same way, we are working to create a roadmap for each AC drive application by receiving market information from people in charge of multiple technical fields and the fundamental technology division. We are currently sorting out the questions and ambiguous points that came up when we created the roadmap by thinking about what the “benefits” are and what “products” are needed to realize those “benefits” for each machine in each application.

Takada The theme of our activities is “drawing a technical roadmap for 2035.” It may be helpful to imagine that we are creating materials for drawing a vision for 10 years in the future. Then, we will discuss the hypothesis of the technical roadmap that we developed in the cross-divisional activities at the engineers meeting. After that, we will make a proposal to the general manager in cooperation with the technical planning that is being considered within the Corporate Technology Division.

Cross-divisional activity at YTC

Q What benefits did this activity bring? And how did it change the development work?

Takeda My team is involved in many products, including servo amplifiers, AC drives, and controllers. For example, when we faced a problem with servos, we heard that engineers in the drives field already had a solution, and we went to the person who had the solution and the problem was solved. In the course of promoting these cross-divisional activities at YTC, exchanges between people across headquarters and divisions have expanded, and in terms of communication, barriers between divisions have been eliminated, making it much easier to ask questions.

Fukumaru I think one of the advantages of these cross-divisional activities is that common issues can be identified, and from there it is easy to collaborate and take action. In fact, common issues with other divisions that came up in the cross-divisional activities led to a request to the basic technology development division, which has now become a development theme for that division, and multiple divisions continue their activities in collaboration. Personally, I have a strong impression that one of the achievements of this cross-divisional activity is creating a flow of collaboration.

Takada In the past, different divisions had different ways of thinking and rules. In the product development process, the elemental technology development division accumulates technologies and then puts them into products. However, if the rules and standards differ between divisions in this process, a smooth transfer may not be possible. As a result, communication to coordinate this tended to be via email or telephone. Now, we have more direct conversations, and communication has become smoother. Of course, the current situation is not perfect, but I feel that the prerequisites for more efficient technological development have been steadily established by continuing to use PDCA.

Sakima I specialize in motors and work in the elemental technology development division. For this reason, I work closely with people who specialize in motors, but of course people in the business division are more knowledgeable about what customers are having trouble with, and they have a lot of information that is necessary to come up with solutions. Now that I can get information directly from other divisions or outside my own area of expertise, it has become easier to work.

Tanaka Before YTC started operations, our bases were physically separated from each other: AC servo in Iruma City, Saitama Prefecture; AC drive in Yukuhashi City, Fukuoka Prefecture; elemental technology in Kitakyushu City, Fukuoka Prefecture, etc. In this situation, even if we had a common project, we would often meet only at meetings, so it was potentially difficult to have daily conversations. For example, in the past, I felt that different divisions would have similar issues, but I didn't say it out loud. In meetings where the subject was clear, we would never discuss anything other than the subject, such as "I'm having a hard time with this ..."

Q What do you want to do with technology development in the future? What are your goals?

Tanaka I am grateful to be able to participate in activities that look ahead to 2035, and I feel it is rewarding. At the same time, I feel it is difficult to think about 10 years in the future. I myself have been working in technology-based (control circuit) fields, but I have been able to learn a lot about "customer voices" from business divisions. By being able to hear "real voices" that I had never heard directly before, I think it will be easier to think about future product and technology development. There is also a common theme that we are working on in the areas of AC servo, AC drive, and elemental technology, which leads to "raising the level of technology, or improving the base technology." As a result, this will be one of the major achievements of YTC's cross-divisional activities, and I would like to make sure that it grows.

Fukumaru I have been involved in the formulation of the roadmap since FY2022, but the goal is not to create a roadmap. Instead, we will continue to work on cross-divisional activities aimed at developing "products" that realize the "needs" of our customers.

Sakima In order to make good use of YTC as an environment for technological development, we often work together top-down, but I feel that there are still few bottom-up proposals like "we should do this kind of thing." I would like to build on the results of our cross-divisional activities that we are currently carrying out, and move more and more from our own initiative to lead to future product and technological development.

Takada We are currently working on a technology roadmap, but I think our mission is ultimately to "put technology into products." In order to do this, of course, a development period is required, but with so many things to do, I think it is important to efficiently proceed with that development. In the past, we had to take the step of developing technology and then commercializing it, but at YTC, we can proceed with technology development and product development in the same place, so we want to shorten the development period and make it more efficient.

Takeda I believe that creating a technology roadmap is a very valuable opportunity. It may not lead to immediate results, but we will continue to work hard to increase Yaskawa's profits and market share 10 years from now. Exchange among engineers is deepening every year, so I would like to work together to further improve working styles and improve efficiency.

Promotion of Technology Development and Innovation

Basic Concept

The Yaskawa Group will continue its efforts to develop products and technologies that are the world's first and best in the world. Through a wide range of initiatives, such as combining these products and technologies, strengthening support for digital data solutions, and expanding collaborations with universities and other companies, the Yaskawa Group will create solutions that solve management issues for customers and contribute to the realization of a sustainable society.

With regard to intellectual property, the Yaskawa Group will promote its intellectual property strategy in conjunction with its business plan and technology strategy, and support business development by preventing intellectual property disputes, accurately protecting its own technologies, and responding promptly to technology agreements that match business characteristics.

Core Technologies

Three core technologies that form the technology development in the Yaskawa Group's business domain of "motors and their applications" are "motion control," "robotics" and "power conversion." These are the core competencies of the Group.

Motion control technology includes motor technology, control technology, encoder technology, and communication technology. Robotics technology consists of robotic arm technology and robot control technology. Power conversion technology includes conversion technology, and technology for miniaturization and higher efficiency.

They are widely applied to our products and are the foundation for our strength.

Motion Control	**Motor technology**	It achieves miniaturization, high torque and efficiency of the motor and smooth rotation and quiet driving. The application of high-performance magnets, higher coil densities, and advanced design techniques through simulation are necessary.
	Control technology	This technology enables precise control of three elements of an object – position, speed, and torque – in response to commands received from the controller. This technology is built into the servo amplifiers and AC drives, making it the basic technology for moving objects in motor drives.
	Encoder technology	In order to accurately control the rotating position of the motor, the encoder is used as a sensor to detect the rotation angle of the motor. The encoder technology realizes high precision and high resolution of the encoder.
	Communication technology	The technology required for FA (factory automation) equipment to communicate at regular intervals without delay is realized by a system including software and hardware. For motion control and FA communication, we are developing design and verification technology for ASIC (Application Specific Integrated Circuit), an IC chip for specific applications.
Robotics	**Robotic arm technology**	It is a group of technologies that integrates the design and manufacturing of mechanisms, such as arm structures, actuators (motor and reducer modules), power transmission mechanisms, and link shapes. The typical arm mechanism for industrial robots is the vertical articulated type, which is adopted by Yaskawa's flagship products.
	Robot control technology	It enables the arms of industrial robots to perform specific actions. This technology includes high-speed, high-precision motion control by coordinating multiple motors to suppress arm-hand vibration, and planning technology that automatically calculates an efficient and optimal path and work order. Motion control includes kinematics, interpolation technology, and sensor application technology. In addition, we develop digital twin technology that integrates motion control technology and planning technology through IoT.
Power Conversion	**Conversion technology**	It controls the voltage, current, and frequency of the input power supply to convert it to the intended output, and has been applied to several of our products, including AC drives.
	Technology for miniaturization and higher efficiency	An AC drive converts AC voltage to DC voltage through a rectifier circuit and performs reverse conversion to convert the DC voltage to any AC voltage and frequency. We develop switching control technology and new device application technology to reduce the loss that occurs during reverse conversion, leading to higher efficiency and smaller AC drives.

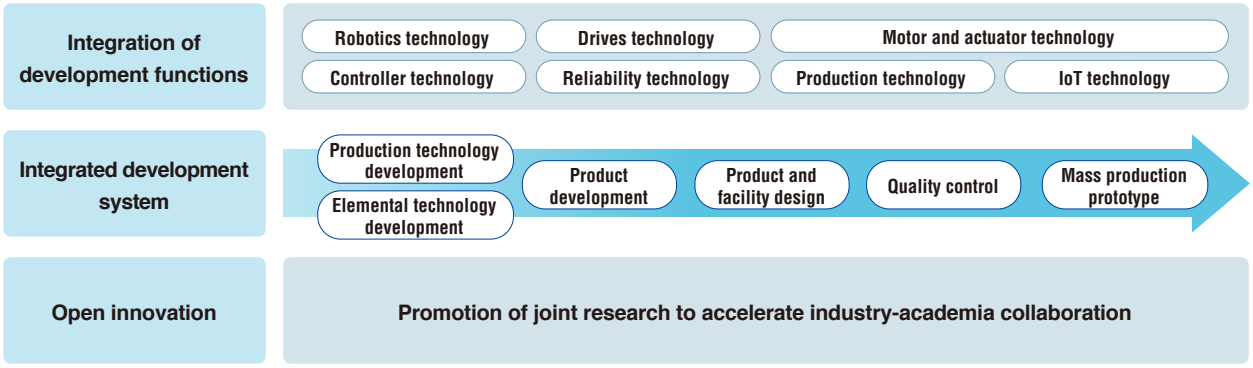
Yaskawa Technology Center: Technology Development Base for Innovation

Yaskawa Technology Center (YTC), a new technology development base at the core of the Yaskawa Group in Japan and overseas, is now in full operation to further strengthen Yaskawa's ability to respond to changing market needs.

The development system and head office development departments that had been dispersed by each division have been consolidated to create an environment in which basic technology development, production technology development, product development, product and facility design, quality control, and mass production trial production can be carried out consistently. As a result, engineers from each division and head office development department can share and exchange information within the same office, promoting active communication.

In addition, by utilizing Yaskawa Digital Transformation (YDX) and building a system to share and link development, production, sales, and quality data, we aim to provide products and services in a timely manner that realize improvement and evolution that customers demand.

Yaskawa Technology Center



Developing New Technologies and Business Domains through Open Innovation

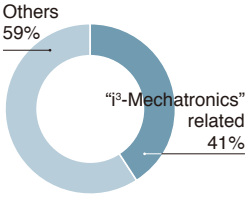
YTC is promoting industry-academia-government collaboration with companies and schools with seed technologies in order to strengthen technology development that captures market changes and embodies customers' future needs. At YTC, the speed and quality of development have improved through the use of the collaborative development office, where partners are stationed. The collaborative development office strengthens future robot technologies and conducts feasibility studies for new business fields. For example, we are working on the development of autonomous drive technology to advance industrial robots and the use of robots in the agricultural sector with National Federation of Agricultural Cooperative Associations. In addition, as an industry-academia collaboration, we are promoting comprehensive collaboration with the Kyushu Institute of Technology, Kyushu University, and Tokyo Institute of Technology for social implementation and accelerating research and development.

Use of robots in agriculture (automating cucumber leaf raking)

Intellectual Property Strategy

Taking advantage of the strengths of YTC, where the Technology Development Division and the Intellectual Property Department of the entire company are consolidated in one location, YTC is engaged in creative invention activities that transcend divisions. In addition, we are strategically filing patent applications with the aim of building a patent network that contributes to our business. In particular, we are strengthening patent applications for technology related to the i³-Mechatronics solution concept in order to ensure that Yaskawa is ahead of the curve. Furthermore, the Intellectual Property Department plays a central role in promoting intellectual property protection activities for products sold globally, locally developed products, and manufacturing know-how in cooperation with Yaskawa Group's overseas affiliates. As part of internal education, Yaskawa conducts intellectual property education for each level and technical field to raise awareness of the importance of intellectual property and strengthen intellectual property activities.

Patent application rate in FY2023



Strengthening Production Capability

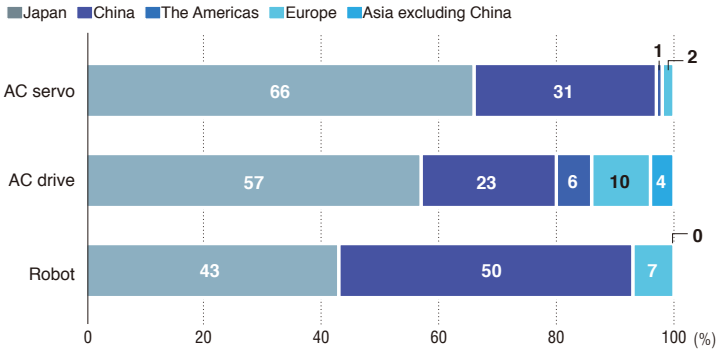
Based on a policy of production in demand areas, the Yaskawa Group conducts optimal production at 29 sites in 13 countries and regions around the globe. Production in each region is based on local procurement, with local procurement rates generally exceeding 80%. Appropriate parts inventories are placed in demand areas to shorten production lead times. This system is designed to respond quickly to changes in demand and minimize risks of environmental changes. At the same time, we take advantage of the benefits of production close to customers in terms of delivery times and relationship building. We also aim to reduce foreign exchange, natural disasters, and geopolitical risks.

Masahiko Okura
Executive Officer
General Manager,
Production Management Div.

Local procurement rate at major production sites
(FY 2023 results/value basis)

Yaskawa Electric	82%
Yaskawa America	87%
Yaskawa Electric UK	68%
Shanghai Yaskawa Drive	90%
Yaskawa Electric (Shenyang)	98%
Yaskawa (China) Robotics	96%

Regional breakdown of production capacity by product
(FY2023 results, one shift, unit basis)



During the period of the mid-term business plan “Realize 25,” the Company is promoting initiatives to realize sustainable manufacturing with high productivity, based on the pillars of the following policies “evolution of our own manufacturing through i³-Mechatronics,” and “building a global optimized production system and resilient supply chain.”

Evolution of our own manufacturing through i³-Mechatronics

In the evolution of manufacturing based on the i³-Mechatronics concept, Yaskawa is focusing most on “manufacturing with minimum manpower dependence.” In the previous mid-term business plan “Challenge 25 Plus,” there were situations in which it was difficult to secure the required production volume when the orders increased sharply between FY2021 and FY2022. In order to overcome the situation where production volume is directly affected by the number of direct workers, Yaskawa will expand the scope of automation and evolve a production system that can respond quickly to changes in demand.

To achieve this, in addition to the automation methods cultivated through the implementation of “i³-Mechatronics,” the Yaskawa Group will pursue production technology approaches such as the use of AI technology, the development of automated equipment on a per-operation basis, and transportation methods to connect between processes. In addition, we will establish a production system that minimizes the dependence on manpower and is highly robust against high-mix variable-volume production by allocating multiple bottleneck equipment and ensuring that equipment capacity is always sufficient to meet the required sales volume. In this way, we will realize a sustainable and stable supply to customers.

Yaskawa Solution Factory, a demonstration plant for “i³-Mechatronics ”

Robot component plant for internal production realizing 24 hour unmanned operation

Realizing a global optimal production system

In establishing a global optimal production system, we will implement the plan outlined in the table below from three perspectives: strengthening the functions of the mother plants in Japan, strengthening production in demand areas overseas, and improving in-house production rates.

In Japan, we are planning to build a new robot factory that will synchronize the production of motors and robots, which were previously produced at separate locations, within the same factory. As a result, we aim to improve the efficiency of production management, shorten lead times, reduce costs, and reduce inventories. We also aim to minimize manpower dependence through automation.

Overseas, we aim to improve in-house production rates for global production by establishing a third substrate production base in Vietnam, following those in Japan and China, and increase the presence of the Yaskawa Group by investing in markets in Europe and the United States that are expected to grow in the future.

Investment plan for realizing global optimized production

Region		Location	Main measures	Start of operation	Purpose		
					Enhancement of mother plant functions	Enhancement of demand area production	Enhancement of internal production
Japan		Kitakyushu, Fukuoka	New robot machining factory	Mar. 2024	●		●
			New robot factory (integrated production of motors)	Mar. 2026	●		
		Yukuhashi, Fukuoka	South-Yukuhashi business site (Yaskawa Automation Drive)	FY2026	●		
			New AC drive factory	FY2028	●		●
			New resin molding parts factory	FY2028			●
Overseas	China	Changzhou	Expansion of substrate line	FY2023 – 2025		●	●
			New machine controller production line	FY2024		●	
	Asia	Vietnam	New factory (production of substrates for production in Europe, the U.S. and India)	FY2026		●	●
	Europe	Slovenia	Robot factory No.2 (engineering and systems)	FY2025 2Q		●	
			Consolidation of European logistic functions	FY2025 2Q		●	
	Americas	United States	Expansion of the robot system plant	Jul. 2024		●	
			Consideration of production of robots	FY2027		●	
			New manufacturing base for motion solutions for semiconductor industry	FY2026		●	

Building a resilient supply chain

In the past, suppliers were selected based on a basic policy of cost reduction, but based on the experience of lockdowns during the COVID-19 pandemic and trade friction, we are reviewing the supply chain to optimize it from the perspective of efficiency, development and manufacturing technology, and BCP as shown in the table below.

Review criteria for parts procurement

1. Total efficiency	Added value of parts, difficulty of in-house production, reduction of procurement lead time, and quality cost
2. Sustained improvement of product QCD (Quality, Cost, Delivery)	Necessity of retaining and improving product development and production technologies
3. Procurement risk (BCP)	Dependence on specific suppliers (Region/Country, Company) and whether there are alternatives

We select in-house production candidates from the parts to be reviewed, and the selected parts are being made in-house on the premise of automation. We are working on the expansion of in-house production of the machining of robot casting parts, board mounting and resin molding parts.

Board mounting

Resin molding

Machining (robot casting parts)

Human Resource Enhancement

Human capital initiative

We implement human resources strategies linked to management strategies while placing the same emphasis on dialogue with employees and investors. Specifically, we strengthen human investment based on the human resources requirements formulated for the execution of business strategies and the visualized human resources data, as well as human resources management that encourages the active participation of diverse human resources.

Yaskawa Group has established a global human resources philosophy that defines our basic concept of the human resources we seek and our personnel system. In order to realize Vision 2025, we will focus on “deepening the understanding of Yaskawa 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 questionnaire 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 contribute to solving customer issues, create new added value for society, and continuously improve corporate value.

Overall human resources strategy

Human resources requirements for business strategy execution

Human resources who can contribute to solving customer problems

Human capital

Key items	Desired outcome	Initiatives	Progress in FY2023
1. Deepening the understanding of Yaskawa Principles	① Implement the concept of i³-Mechatronics by concentrating the vectors of all employees, from management to general employees, toward the achievement of Vision 2025	a. Reorganize the corporate motto and educate employees to promote the principles b. Implement principles education by management c. Translation of management principles into multiple languages	▶ Creation and distribution of philosophy cards ▶ Principles education Total of 1,400 managers* participated (9 domestic group companies and 3 overseas companies) *Total since FY2022
2. Evolving diversity and inclusion	① Build a corporate structure that is resilient to environmental change through human resources with diverse values and ideas, and create a corporate culture in which innovation inevitably occurs ② Create an environment in which diverse human resources can perform their duties smoothly	a. Increase female employment ratio b. Female career advancement training c. Recruit experienced professionals d. Awareness raising of unconscious bias	▶ 16% of new graduates hired (13 females/80) ▶ 28% of new hires (35 experienced professionals /125) ▶ Implemented e-learnings for all employees in August and December 2023
3. Training and optimal placement of professional human resources	① Increase the competitiveness of the organization by increasing the number of professionals and flexibly respond to changes and crises ② Develop employees through their work so that they realize their contribution to business activities and improve their job satisfaction	a. Visualization of career paths by department b. Future management leader training c. Promotion of FA System d. KAIZEN30 activity e. Introduction of a fair evaluation and compensation system based on the level of contributions	▶ Follow-up training for participants of the future management leader training ▶ 16 employees were matched through FA System
4. Creating a comfortable work environment	① Create an environment where employees with diverse lifestyles can increase productivity and achieve results ② Eliminate diseases and injuries caused by working at the company, and realize a healthy, safe, cheerful and rewarding workplace by supporting health promotion	a. Introduction of time- and location-independent working system using telework and ICT b. Introduction of short-day and short-time working systems for senior reemployed employees (expanding work options to fit individual lifestyles) c. Injury prevention activities and employee health support	▶ Acquired a certification of “Excellent Health Management Corporations 2024”

Problem solving and improvement

Monitoring and measurement

5. Identifying engagement levels through proactive communication with employees			
① ES questionnaire (employee awareness survey)	▶ 12 times (1 time/month)*5	② Direct dialogue with management (dialogue meetings)	▶ 9 times

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.

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

initiatives

Improve productivity

	KPI (FY2025)	Progress of FY2023
Penetration of management principles among employees*1	80% or more	52%
Ratio of female managers	Non-consolidated / Group in Japan 3.4%*2	Non-consolidated: 2.4% Group in Japan: 2.6%
Human rights due diligence (DD)	Introduction and establishment of human rights DD process	Implementation of human rights DD for domestic groups and assessment of status of initiatives at major global sites
Ratio of processional human resources*3	Corporate average 20% or more*4	15%
Positive response rate for job satisfaction	80% or more	86%
Frequency of lost time injuries	Non-consolidated: Maintain 0.2 or less Group in Japan: Maintain 0.4 or less Major production bases overseas: Maintain 0.4 or less	0.16 0.44 0.56

Improve job satisfaction

Realization of Vision 2025

- Contributing to solving customers' management issues
- Creating new added value for society

Realization of Yaskawa Principles

Contribute broadly to social development and human welfare through the execution of our business

*1 Percentage of employees whose work is based on actions of Yaskawa Principles
*2 Target was revised in June 2024
*3 A person at the level of being able to teach others in the skills within a task to which he or she is assigned
*4 Definition of professional human resources and target values were revised in June 2024
*5 Conducted for all employees of Yaskawa Electric (approximately 3,000 employees)

Human Resource Enhancement

Initiatives to accelerate the improvement of productivity and job satisfaction

1. Deepening the understanding of Yaskawa 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 Yaskawa Principles by dividing it into "Our Purpose," "Our Values," and "Our Actions." (See page 1.)

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 "i³-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 the Yaskawa Principles.

Principles education for managers at YASKAWA AMERICA, Inc.

Monitoring by ES questionnaire

	2022/1	2023/1	2024/1
Recognition of Yaskawa Principles	74%	94%	96%
Penetration rate of Yaskawa Principles*	28%	45%	52%

* 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 (FY2023). 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 a gap between men and women in opportunities and their willingness to do difficult jobs or jobs in new fields.

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, in FY2023, we conducted e-learning training on diversity for all employees, including awareness of unconscious bias.

Monitoring by ES questionnaire

	2020/6	2021/6	2022/6	2023/9
A workplace culture that leverages the strengths of diverse human resources*1	59%	71%	78%	84%
Willingness to be a manager	49%	45%	45%	56%
Female employees	21%	22%	29%	38%
Male employees	52%	50%	48%	59%

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

Monitoring by ES questionnaire

	2022/12	2023/6
Opportunities for challenging work*2	64%	64%
Female employees	57%	59%
Male employees	65%	64%

	2022/12	2023/6
Willingness to pursue challenging work*3	64%	69%
Female employees	54%	57%
Male employees	66%	71%

*2 Percentage of respondents who answered that work in new areas or more challenging work are offered fairly according to individual motivation, ability, and environment, regardless of gender
*3 Percentage of respondents who answered that they want to pursue new areas or more challenging work

Recruitment of experienced professionals

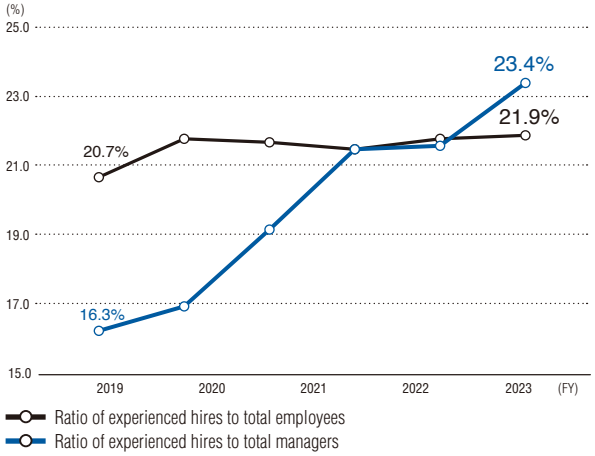
In order to secure the personnel necessary to realize our management strategy, we actively recruit professionals with experience in each field. The ratio of experienced hires to total hires is increasing year by year. We actively provide them with challenging opportunities, so that they can be selected and promoted to general managers and section managers depending on their contribution and roles.

Ratio of experienced hires

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

FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
7.8%	5.0%	11.9%	13.1%	26.8%	28.0%

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



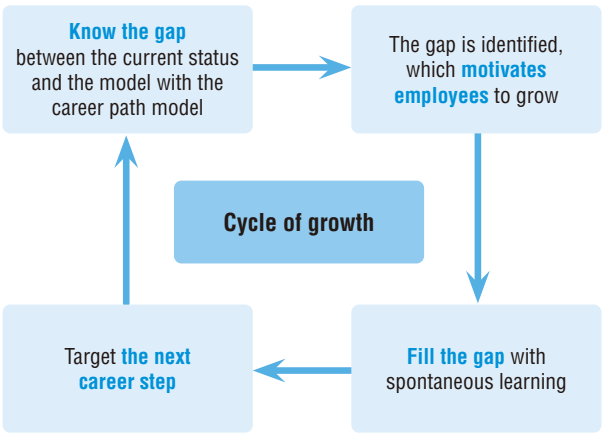
Localization of overseas operations

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 the 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.”



Sharing career path models and creating career plans	• Created career path models in all departments in FY2022 and shard them internally • 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
Free Agent system	• The FA system was introduced in FY2020 to support employees’ independent career development. • More than 80% of the employees transferred under this system improved their job satisfaction compared to before using the system (confirmed by ES questionnaire).

Human Resource Enhancement

Early development 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 provide employees with opportunities to think about their careers and goals immediately after joining the company as well as make them acquire necessary knowledge at an early stage, and encourage them to develop their careers autonomously.

Introductory training for new graduate hires and experienced professionals	Acquire the necessary knowledge (management principle, company vision, company system, etc.) and develop a mindset for new employees
Follow-up training	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
Career plan presentation	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.
Yaskawa Freshers Technical School (YFTS)	New technical employees acquire basic product knowledge and basic elemental technology (principles, etc.) necessary as Yaskawa engineers

YFTS training

Selection and development of next-generation management (Future management leader training)

Future management leader training is held to develop candidates for next-generation management, who will be responsible for YASKAWA Group’s business development and sustainable growth, as human resources capable of formulating strategies for management innovation.

We make this training a prerequisite for appointment as officers. The training started in 2001 and a total of 127 employees have participated in it. In FY2023, follow-up training was conducted for 13 employees who participated in the training in FY2022.

Improving problem-solving skills through KAIZEN30 activities

Under the slogan “Let’s increase (KAIZEN) operational efficiency by at least 30%,” this is a human resource development activity with the participation of all employees to improve the ability to solve problems and issues that lead to the improvement of the corporate structure by putting QC stories* into practice through improvement activities.

We consider QC stories as a form of work etiquette. KAIZEN30 activities are implemented throughout YASKAWA Group with the aim of improving organizational productivity and all employees are required to understand and practice them.

In addition, we hold results presentations and awards for improvement, including group companies in Japan and overseas, to expand the good examples horizontally and to raise motivation through praise and encouragement.

* Methods for solving problems in quality management. We identify and solve problems through the following steps: selecting themes, grasping the current situation, setting goals, planning the schedule, formulating measures, pursuing success scenarios, confirming effects, standardizing and managing, and looking back and future policies.

Results presentation

Awards for improvement

Fair evaluation and compensation system based on contribution

In order to improve employees' sense of contribution and job satisfaction, we have shifted from seniority-based evaluations based on accumulated knowledge and skills to evaluations based on the performance (contribution) achieved by performing duties and have revised 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. So far, approximately 80% of all employees in Yaskawa Group in Japan are members of the shareholding association.

Details of implementation after FY2020

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 **expanded 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)
			Introduction of performance-linked bonus formula with no maximum amount to be paid
		Retirement benefits	**Expansion of defined contribution pension plans (DC)** to encourage self-help efforts

Monitoring by ES questionnaire

	2021/5	2022/6	2022/11	2023/6	2023/11	2024/6
Satisfaction with the evaluation system	73%	76%	72%	79%	75%	78%
Rate of feedback on previous term's evaluation	71%	73%	82%	80%	83%	76%
Satisfaction with feedback	-	96%	96%	95%	96%	96%

4. Creating a comfortable work environment

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. We acquired a certification of "Excellent Health Management Corporations 2024" in March 2024.

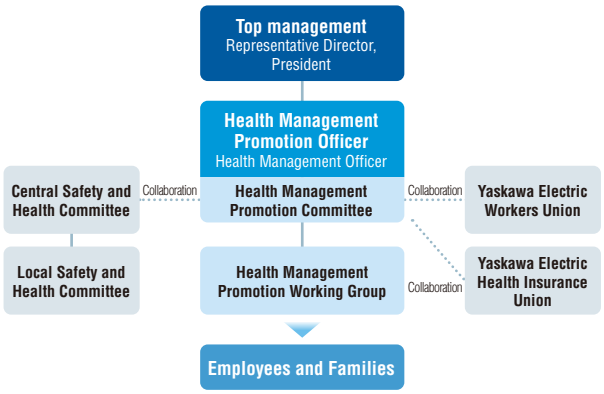
2024 健康経営優良法人 Health and productivity

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

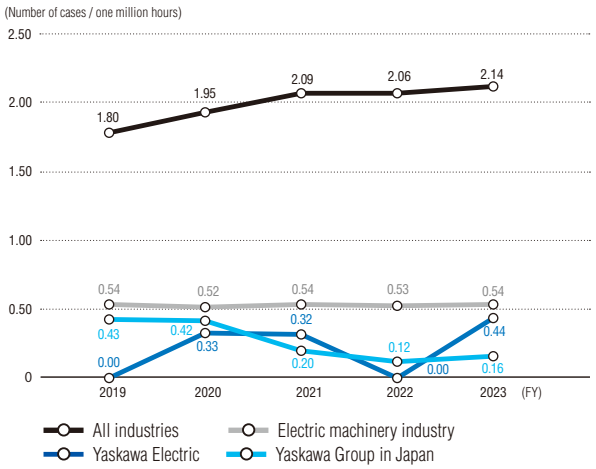


Human Resource Enhancement

The frequency rate of industrial accidents in Yaskawa and the domestic group remains below the average for the same industry. Taking the situation of accidents in FY2023 into consideration, we will continue to make efforts to prevent accidents by conducting various safety patrols on a regular basis.

Occupational safety and health	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
Employee health support	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
Mental health measures	Lifestyle and employment support for psychiatric illnesses and disabilities
	Feedback to individuals and workplaces using the stress check system

Frequency of work accidents (Frequency rate)



Realization of diverse working styles

We introduced a telework system to create an environment in which productivity and results can be achieved regardless of time or place. 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 addition, 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 location according to their life events, regardless of the reason, and that does not involve changes in treatment.

Moreover, we will improve work-life management by encouraging men to take child-care leave, thereby improving productivity and job satisfaction. The ratio of men taking child-care leave was 56% in FY2023.

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. 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 through registered questionnaires and analyze the data in specialized department to rotate PDCA cycle. Then, we aim to solve various problems faced by employees 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 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.

An analysis of the survey on job satisfaction conducted in FY2023 shows that “pride in working at Yaskawa” and “sympathy with the Yaskawa Principles” are positive, but “realization of career paths” and “environment for consulting on careers” need to be improved. We will raise the priority of items requiring improvement and proceed with initiatives.

Monitoring by ES questionnaire

	2021/1	2022/1	2023/1	2024/1
Satisfaction with the ES questionnaire	81%	82%	81%	91%
Changes and effects of the ES questionnaire*	54%	59%	54%	69%

*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

Survey

1. Four fixed questions:
Quantitative data to be checked monthly (business penetration, management confirmation, business volume, vacation)

2. Fixed point observation theme:
Theme to confirm changes over time by checking 1-2 times a year (Work satisfaction, diversity, etc.)

3. New theme:
Theme according to the current topics

4. Qualitative comments:
Qualitative data that provides raw voice of employees

Correspondence

1. On-site correspondence:
Workplace improvement and SOS caller response

2. Results analysis and feedback:
Disclosure of report to employees (within one month)

3. Reflection on various measures by the department in charge of the theme:
System improvement

4. Feedback on qualitative comments:
Response rate 100%

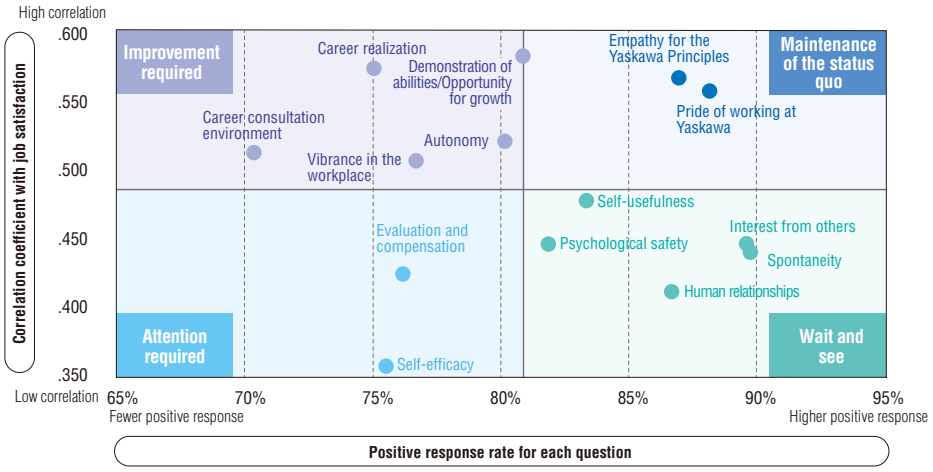
Reflection in management policies

ES questionnaire theme (FY2023 results)

Part 1	Mid- and long-term compensation system, employee shareholding association, and survey on employees' attitudes toward "work"	Part 7	KAIZEN30 activities, internal newsletters, group newsletters, diversity
Part 2	Penetration of policies and targets for this fiscal year and CS (customer satisfaction)	Part 8	Compliance, YASKAWA report, management
Part 3	Job satisfaction and company performance	Part 9	Job satisfaction and evaluation system
Part 4	Evaluation system, ES questionnaire	Part 10	Environmental awareness, understanding and penetration of "Realize 25"
Part 5	Crisis management, health improvement, human resource development	Part 11	Yaskawa Principles, ES questionnaire
Part 6	Human rights and social contribution	Part 12	ICT activities (YDX, information systems), internal control education

Results analysis of ES questionnaire for job satisfaction (May 2023)

In order to understand the factors that contribute to the improvement of job satisfaction, we set 15 questions on topics such as "pride in working at Yaskawa," "empathy with the Yaskawa Principles," "growth opportunities," and "career realization." The analysis is based on the positive response rate for each question and the correlation between each item and job satisfaction.



Direct dialogue with management

We conduct our own activities to promote human resource development through direct dialogue (dialogue meetings) with the president. 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.

Respect for Human Rights

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 Principles, 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

The General Managers in charge of Sustainability, General Affairs, and Procurement divisions, all of whom are appointed by the Representative Director, President, are responsible for respecting human rights in the Yaskawa Group and its supply chain.

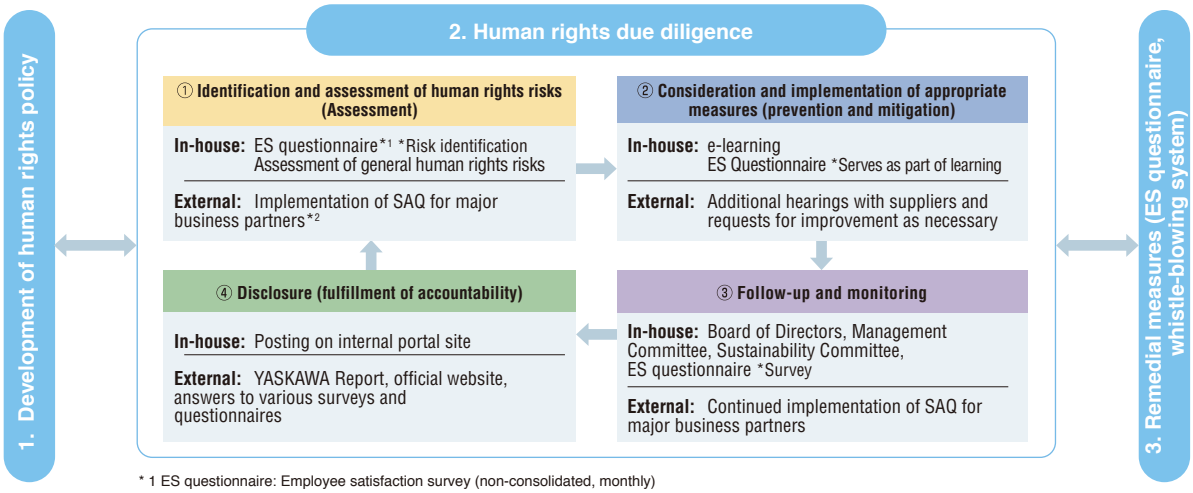
With regard to these initiatives, the Sustainability Committee, chaired by the president, regularly discusses and monitors these measures, and the Board of Directors deliberate and make decisions on important matters.

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)

FY2023 Activities and Future Plans

In FY2023, we conducted in-house education through e-learning and confirmed potential risks through ES questionnaires to raise employees' awareness of human rights. In addition to raising awareness through ES questionnaires at the Yaskawa Group companies in Japan, we also checked the responses required in overseas countries.

In FY2024, we will continue our activities in Japan and respond to changing social demands globally while communicating with our overseas subsidiaries.

Dialogue and Co-creation with Stakeholders

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.

Contributing to Local Communities

FY2023 results

In FY2023, as COVID-19 was classified as Class 5 under the Infectious Diseases Control Law, in addition to continuing support for education, sports promotion, culture and the arts, we also resumed community volunteer activities.

We are supporting the development of human resources in science and engineering in Kitakyushu, a manufacturing city, by accepting school trips in YASKAWA Innovation Center, holding a children's school, assisting students at technical high schools in obtaining licenses to operate robots, and holding an event called "Girls Day" to support middle and high school girls in their career choices. We are also promoting CSR activities to co-create with the community, by participating in the Kitakyushu Marathon as a volunteer, cleaning up beaches, and volunteering at children's cafeterias. In addition, we have completed the planning and production of the "Handmade Robot Kit" as the new "program for the development of manufacturing human resources" which we have been promoting since FY2022.

"Girls Day"

Kitakyushu marathon volunteer

FY2024 initiatives

The "Handmade Robot Kit" is scheduled to be put into practical use in FY2024. After a trial period for employees and their families, it will be put into practical use for the first time on "Girls Day," which is scheduled to be held again this fiscal year. We expand the number of eligible technical high schools to assist students to obtain licenses to operate robots. At the request of the Consortium of Human Education for Future Robot System Integration (CHERSI), we will also provide classroom lectures to technical high school students and teach teachers how to operate robot simulators. We will continue to increase opportunities for employee participation in activities that contribute to local communities to create a rewarding workplace and contribute to the revitalization of local communities.

Handmade Robot Kit

Making "Handmade Robot Kit" on "Girls Day"

Respect for Human Rights

To Ensure Customer Satisfaction

FY2023 results

As part of our activities to pinch off the “bud of PL,” we conduct product safety risk assessments for selected incidents based on failure information, and continuously improve our products. For our quality fraud prevention activities, we expanded the scope of our activities to include domestic group companies and thoroughly inspected contracts with customers who have product shipment tests and confirmed that there were no major defects. To detect and solve quality problems as early as possible, we are working to unify market quality information on a global basis and improve products by identifying signs of quality problems before they develop into serious problems.

Maintenance by a service engineer

FY2024 initiatives

For our customers to use our products with safety and security, we will develop “pinching off the bud of PL” and “quality fraud prevention activities” on a global basis and strengthen cooperation with overseas bases. The Yaskawa Group will respond to customer feedback in a timely and appropriate manner and strive to make continuous improvements to earn the trust of customers.

To Build a Sustainable Supply Chain

FY2023 results

In order to confirm compliance with the Sustainable Procurement Guidelines*1, we asked the major suppliers in Japan and China*2 to respond to SAQ (Self Assessment Questionnaire) and obtained consent forms for the Sustainable Procurement Guidelines and confirmed 100% compliance. We also confirmed that our Group companies in Asia and the United States have completed the establishment of guidelines.

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

FY2024 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. In FY2024, we will implement the second SAQ in Japan and promote SAQ deployment at group companies in Asia and the United States.

Dialogue with Shareholders and Investors

FY2023 results

Yaskawa believes that it is important to promote constructive dialogue with shareholders and investors 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 FY2023, we engaged in dialogue with a total of 1,023 institutional investors and analysts.

To enhance engagement with shareholders, we held SR meetings with shareholders in Japan and overseas to discuss ESG and management. The opinions received during these meetings are shared at the Board of Directors Opinion Exchange Meeting and are fed back to management to improve management measures.

In addition, the scripts (in Japanese and English) of the financial results summary materials have been posted on the official website since the second quarter of FY2023. By enriching the primary information provided by Yaskawa, we will strengthen information dissemination that contributes to investors' understanding of the Company.

Activities	Results
Results briefing for analysts and institutional investors (telephone conference, etc.)	6 times
One-on-one meeting with institutional investors	312 meetings
Conference meeting hosted by securities companies	33 meetings
Meeting at NDR	46 meetings
Seminar for individual investors	2 times

FY2024 initiatives

In FY2024, 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 2024, we held “Briefing on Sustainability”, in which the management team explained its sustainable management policy and human resource development and engaged in lively interactive discussions. At the briefing session, Ms. Kubota, President of AI Cube Inc., a subsidiary that develops AI solutions, explained how synergies can be created by combining Yaskawa’s existing products with AI technologies, which attracted particular interest from the participants. We received feedback from participants, saying that “expectations for the future use of AI have increased” and “understanding of the differentiation strategy of the autonomous robot MOTOMAN NEXT (launched in December 2023) has deepened.”

Management answering questions at “Briefing on Sustainability”