



# **YASKAWA**

## **YASKAWA Report 2021**



# OUR PHILOSOPHY

## Toward the Realization of the Automation Revolution

Since its establishment in 1915, Yaskawa Electric has focused on the field of electric motors and their applications, and has always supported the cutting-edge industries of the age with its products and technologies. The aspirations of our founder, Daigoro Yasukawa, have been passed down and taken root through management principle in Yaskawa Group.

With management principle always at the center of our business activities, we will utilize the core technologies we have cultivated to contribute to solving our customers' management issues and to solving environmental and other social issues.

### Yaskawa Group Principle of Management

At Yaskawa our mission is to leverage the pursuit of our business to contribute to the advancement of society and the well-being of humankind.

We will realize our mission by executing these core tenets:

1. Develop and enhance world-class technologies, with an emphasis on our foundation of quality.
2. Boost management and operation efficiency and achieve the returns necessary for the successful growth of the company.
3. Satisfy the needs of the market and dedicate ourselves to serving our customers as a customer centric organization.



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# OUR IDENTITY

## Six DNAs that have been nurtured since our founding (Corporate Culture)

### ① **A company founded on technology**

Continuing the founder's desire to "make efforts to design and produce products unique to our company," rather than imitating the precedent of the West, we always create cutting-edge technologies and products based on our corporate motto to be a company founded on technology.

### ② **Pursuing customer satisfaction**

We implement the sales policy from the time of the company's founding that "The first priority shall be to never forget our ideals for the sake of temporary profits and to satisfy our customers with all our sincerity."

### ③ **Quality-oriented**

We apply the concept of quality that has been fostered through the construction of customer production facilities that do not stop 24 hours a day to products and services, and aim for overall customer satisfaction.

### ④ **Mechatronics**

We proposed the concept of "mechatronics (mechanism + electronics)" for the first time in the world in 1969 based on the idea to achieve higher performance by combining customer machines with Yaskawa motors and controllers.

### ⑤ **Policy management**

In the 1980s, Yaskawa established a management system based on TQC (Total Quality Control) as a tool to shape the entire company toward the Mechatronics business vision and established it as a corporate culture.

### ⑥ **Glocal management**

In addition to management based on a global concept, we implement "*glocal*" management, including local production for local consumption and global sales networks, so that we can respond appropriately to local needs anywhere in the world.

## Our Strengths



**R & D focused on the world's first  
and best technologies**

**Customers' trust**

**Ability to create innovation**

**Ability to execute business**

**Global management rooted  
in local communities**

# OUR HISTORY

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.” Over the past 100 years since its founding, the six DNAs that have been nurtured as a result of the wisdom of the people in each era and the bold challenges made without fear of failure have become the key corporate cultures that give Yaskawa Group its strength today.



Promoter  
**Keiichiro Yasukawa**

Keiichiro Yasukawa, the promoter of Yaskawa absorbed new knowledge and philosophies from the West. He engaged himself in mining, later expanding his business to spinning, steel, railway and banking. He personally funded the opening of Meiji College of Technology, a vocational school for training engineers. The school later became Kyushu Institute of Technology, and continues to produce numerous engineers to this day.

Electric motors were starting to advance into all industrial segments as replacements for steam engine at the beginning of the Taisho period. Daigoro Yasukawa, the fifth son of Keiichiro, 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 you run the business,” 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 wished to contribute to the nation by exporting domestically produced motors to overseas as “motivation of establishment,” and aimed at undertaking the business with the company’s own technologies, not by copying the leading Western products.



Founder  
**Daigoro Yasukawa**

1915

Founding



**Three-phase induction motor**  
Yaskawa’s first commercial product



**The first VS motor 5HP**  
Variable speed motor



**Minertia motor**  
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.

**Motion Control**

## Electric Motors and their Applications

1915-

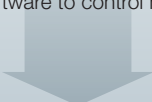
### Startup period

▶ **Development of society and industry**

Coal mining equipment shifted from steam engines to electricity (motor)

▶ **Developments in management**

- In addition to various motors, a variety of products such as switches and transformers were developed, but the Company was in the red for 17 years since its establishment.
- Focused management resources on “electric motors and their applications”
- Set forth a business policy stating that “the first priority shall be to never forget our ideals for the sake of temporary profits and to satisfy our customers with all our sincerity.”
- Focused on motors as hardware and intelligence as software to control motors



**Company founded on technology**

**Pursuing customer satisfaction**

▶ **Six DNAs that have been nurtured since our founding (corporate culture)**

1950-

### Motor manufacturer

Energy shifted from coal to oil, and the heavy and chemical industries developed

- Shifted business to production facilities (process automation) for materials such as steel manufacturing and spinning, which require stable operation 24 hours a day
- Achieved results in blast furnace electric products and Increased market share
- Proposed concept of “Mechatronics” ahead of the world (1969)



**Quality-oriented**



Robotics

Power Conversion

### 1970- Automation provider

Expansion of mass production-oriented manufacturing of automobiles, home appliances, etc. due to Japan's high economic growth

- Accelerated business expansion from conventional process automation to factory automation
- Aggressively devoted management resources into the rapidly growing mechatronics market; unveiling new products back-to-back
- After the business crisis caused by the oil crisis in 1974, introduced TQC (Total Quality Control) and focused on improving the management structure. Won the Deming Prize in 1984

**Mechatronics**

**Policy management**

### 1990- Mechatronics promoter

Popularization of personal computers and progress in computerization

- Changed the company name from YASKAWA Electric Manufacturing Co., Ltd. to YASKAWA Electric Corporation (1991)
- Expanded overseas business bases amid continued weakness in the Japanese market due to the collapse of the bubble economy
- The "glocal" vision penetrated which enabled thinking on a global scale and activities rooted in local communities

**Glocal management**

### 2005- Total solution provider

Spread of the Internet and smartphones  
Transition to a data-driven society through the use of IoT and AI

- Commenced operations at China's AC servo drive plant in 2010, a robot plant in 2013, and a Slovenian robot plant in 2019, with a focus on local production
- Launched "i<sup>3</sup>-Mechatronics," a new solution concept (2017)
- Integrated production, sales and technology to establish "i<sup>3</sup>-Mechatronics" business model and promoted digital management with YDX (YASKAWA Digital Transformation)
- Focused on value creation in manufacturing cells (assembly and processing processes)
- Established YASKAWA Technology Center (YTC) in 2021 as a base for integrated technologies

# OUR GLOBAL NETWORK

## U.K.: Cumbernauld



## Slovenia: Kočevje



## China: Shenyang



## India: Bengaluru



## China: Changzhou



## Europe, Middle East & Africa

### Germany

- YASKAWA EUROPE GmbH

### Sweden

- YASKAWA NORDIC AB

### U.K.

- YASKAWA ELECTRIC UK LTD.
- YASKAWA UK LTD.

### Italy

- YASKAWA ITALIA S.R.L

### France

- YASKAWA FRANCE SAS

### Spain

- YASKAWA IBERICA S.L.

### Finland

- YASKAWA FINLAND OY
- THE SWITCH ENGINEERING OY

### Norway

- THE SWITCH MARINE DRIVE NORWAY AS

### Netherlands

- YASKAWA BENELUX BV

### Slovenia

- YASKAWA EUROPE ROBOTICS D.O.O.
- YASKAWA SLOVENIJA D.O.O.
- YASKAWA RISTRO D.O.O.

### Czech Republic

- YASKAWA CZECH S.R.O

### Poland

- YASKAWA POLSKA SP. ZO. O.

### South Africa

- YASKAWA SOUTHERN AFRICA (PTY) LTD.

### Turkey

- YASKAWA TURKEY ELEKTRIK TICARET LTD. STI.

### Israel

- YASKAWA EUROPE TECHNOLOGY LTD.

**U.S.A.: Buffalo Grove, Illinois**

Operating bases in  
30 countries and  
regions around the  
world

28 production sites  
in 12 countries and  
regions

**Japan: Kitakyushu, Yukuhashi, Iruma****China: Shanghai**

## Asia-Pacific

**China**

- YASKAWA ELECTRIC (CHINA) CO., LTD.
- SHANGHAI YASKAWA DRIVE CO., LTD.
- YASKAWA TSUSHO (SHANGHAI) CO., LTD.
- YASKAWA ELECTRIC (SHENYANG) CO., LTD.
- YASKAWA SHOUANG ROBOT CO., LTD.
- YASKAWA (CHINA) ROBOTICS CO., LTD.

**Korea**

- YASKAWA ELECTRIC KOREA CORPORATION

**Taiwan**

- YASKAWA ELECTRIC TAIWAN CORPORATION

**Singapore**

- YASKAWA ASIA PACIFIC PTE. LTD.

**Thailand**

- YASKAWA ELECTRIC (THAILAND) CO., LTD.

**Indonesia**

- PT. YASKAWA ELECTRIC INDONESIA

**India**

- YASKAWA INDIA PRIVATE LIMITED

**Vietnam**

- YASKAWA ELECTRIC VIETNAM CO., LTD.

**Malaysia**

- YASKAWA MALAYSIA SDN. BHD.

## The Americas

**U.S.A.**

- YASKAWA AMERICA, INC.
- SOLECTRIA RENEWABLES, LLC

**Canada**

- YASKAWA CANADA INC.

**Mexico**

- YASKAWA MEXICO S.A. DE C.V.

**Brazil**

- YASKAWA ELETRICO DO BRASIL LTDA.
- MOTOMAN ROBOTICA DO BRASIL, LTDA.

# OUR PRESENCE

Yaskawa's unique advantage is that it provides all AC servo motors, AC drives and robots, which are essential components for manufacturing.



Minertia motor  
\* Motor that is the basis of current servo motors



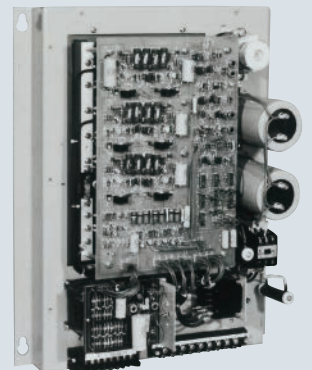
Since the invention of **the world's first minertia motor\*** in 1958, a total of **20 million servo motors** have been shipped!

# 20 million units



Since the commercialization of **the world's first general-purpose transistor AC drive** in 1974, a total of **30 million AC drives** have been shipped! Yaskawa AC drive reduces global annual electric power consumption by approximately **4%**.

# 30 million units



Transistor AC drive



MOTOMAN-L10



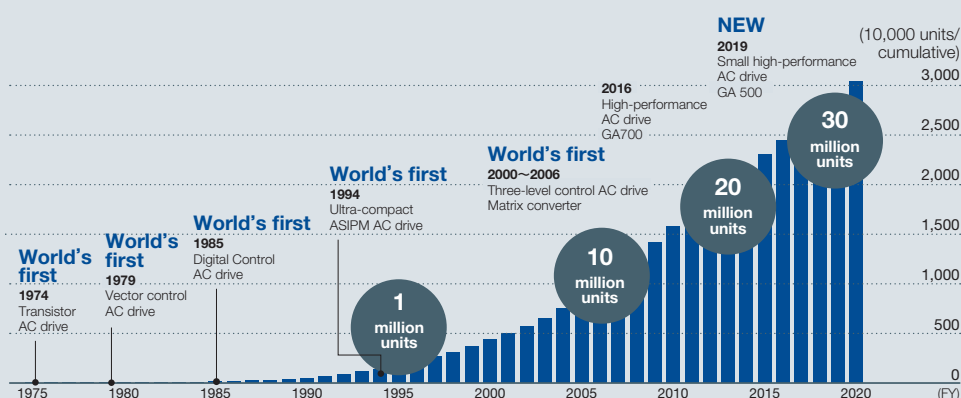
Since the commercialization of **Japan's first all-electric vertical articulated industrial robot** in 1977, a total of **500,000 units** have been shipped!

# 500,000 units

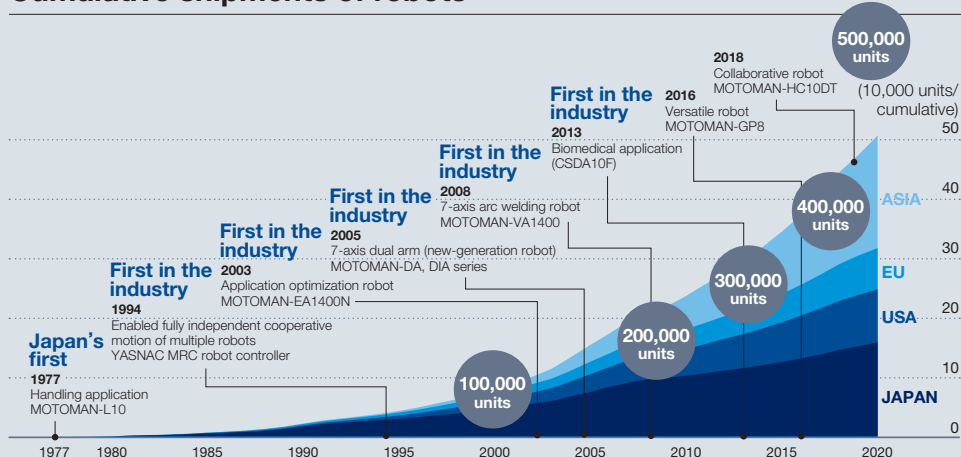
## Cumulative shipments of servo drives



## Cumulative shipments of AC drives



## Cumulative shipments of robots



# Value Creation Process to Realize Long-Term Business Plan “Vision 2025”

## External Environment

### Declining birthrate and aging population in developed countries

- Work style reform
- Productivity improvement
- Labor-saving
- Elimination of 3D labor
- Multi-product variable-volume production

### Human rights

- Promotion of Diversity
- Building a sustainable supply chain

### Environmental issues and climate change

- Decarbonization
- Energy conservation
- Stable supply, safety and security of food
- Utilization of renewable energy

### Evolution of information and communications technology

- Digital transformation (DX)
- Information security

## Input (FY2020)

### 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. We maintain and improve a sound financial position to support stable business operations.

Profit attributable to owners of the parent:	18.9 billion yen
Equity attributable to owners of the parent (End of FY):	246.2 billion yen
Interest-bearing debt (End of FY):	76.5 billion yen

### 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. As a business-to-business manufacturing company, we will utilize the capital to propose improvements to our customers' production.

Capital investment:	22.79 billion yen
(Ratio to revenue)	5.8%

### Intellectual Capital

As a “company founded on technology” we will continue to develop the world's first and best technologies, strengthen our response to digital solutions, collaborate with joint development partners, and exercise our global intellectual property strategies to create customer value, thereby realizing sustainable business development.

R & D expenditure:	17.85 billion yen
(Ratio to revenue)	4.6%

### Human Capital

In order to respond swiftly to rapidly changing global markets and to achieve corporate evolution and strengthen competitiveness, it is important for diverse employees to make the most of their abilities. We will strengthen our human resources while aiming to be a company that is rewarding to work for.

	End of FY
Number of employees:	14,892
(Of which, 49% were employees at overseas bases)	

### Social and Relationship Capital

Yaskawa Group's business is founded on relationships of trust with stakeholders, including customers, business partners, and local communities. We are working to build relationships that lead to continuous mutual development.

	End of FY
Business bases:	30 countries and regions

### Natural Capital

Based on the recognition that global environmental conservation is one of the most important issues shared by all humankind, 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).

Environmental conservation costs:	approximately 1.2 billion yen
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## Product

### Motion Control

#### AC Servo & Controller Business

- Contributing to the enhancement of the performance of various machines and improving productivity in the factory
- Dominantly competitive with the world's No. 1 market share for world-class precision and quality



- Global contribution to energy conservation through cutting-edge drive technology and production innovation
- As a leading company in drive control, centering on AC drive and PM motors, active in a wide range of fields, from infrastructure equipment to plant equipment and household equipment

### Motion Control

#### AC Drive & PM Motor Business

Empower Innovation

R & D focus on world's best technology

Motion Control

Power Electronics

Robot Technology

Deliver Performance

## Sustainability Challenge

• Create social value and solve social issues through business activities

Yaskawa's Inherited DNA (Corporate culture)

A company founded on technology

Pursuing customer satisfaction

Quality-oriented

## Management principle of the Yaskawa Group

"Leveraging the pursuit of our business to contribute to the advancement of society and the well-being of humankind"

### Realization of "Vision 2025"

Yaskawa's FY2025 goals

#### Respect Life

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

#### Empower Innovation

Venture in new technologies/domains/targets to bring "Waku-Waku"<sup>\*1</sup> excitement to people.

#### Deliver Results

Deliver assured results to stakeholders, while continuously enhancing business execution capabilities.

<sup>\*1</sup> "Waku-Waku": Onomatopoeia used in Japanese language to express someone's feeling of enthusiasm

### FY2025 Financial Targets

Operating profit 100 billion yen

ROE: 15.0% or more

ROIC: 15.0% or more

Dividend payout ratio: 30.0% +  $\alpha$

## Portfolio

### Robotics

- Solving the labor shortage, which is a global issue of manufacturing, and contributing to solving the problem of the shortage of skilled workers at production sites and making more sophisticated manufacturing
- As a leading robotics company, active in a wide range of fields from automobiles and semiconductors to general industries



- Expands clean energy business with PV inverter for photovoltaic power generation and electric products for wind power generation
- Support for advanced operation and maintenance of water treatment plants and other social systems

### System Engineering

## Goals and Targets

- Strengthen management foundation that contributes to sustainable society/businesses

## Business Domain

### Factory Automation/Optimization

- Realization of revolutionary industrial automation through "i<sup>3</sup>-Mechatronics"
- Pursuing the global No.1 in core business



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

### Mechatronics Applications

- Challenge for new mechatronics applications
- Energy Saving
- Food & Agriculture
- Clean Power
- Humatronics



## Output (FY2020)

### Financial Capital

- ROE: 8.0%
- ROIC: 7.0%
- Dividends (Payout ratio): 6.2 billion yen (33.1%)

### Manufacturing Capital

- Productivity improvement: 103% (Compared to FY2019)

### Intellectual Capital

- Selected as "Derwent Top 100 Global Innovators Award 2021" for six consecutive years
- YIP (Yaskawa Innovation Program)<sup>\*1</sup> cumulative number of projects: 13

### Human Capital

- Percentage of employees who feel rewarding to work: 80%
- Lost-time injury frequency rate: 0.33 (Cases/1 million hours)
- Percentage of overseas employees in the Yaskawa Group: 49%

### Social and Relationship Capital

- Inclusion in the MSCI Japan ESG Select Leaders Index and the MSCI Japan Empowering Women Index (WIN)
- Number of visitors to YASKAWA Innovation Center: 4,032
- Number of meetings with shareholders and investors: 344
- Establishment of Sustainable Procurement Guidelines
- Overseas revenue ratio: 65%

### Natural Capital

- CO<sub>2</sub> emission reduction rate: 10% (Compared to FY2018)
- CCE 100<sup>\*2</sup>: Approx. 63 times

### Results of mid-term business plan "Challenge 25"

Revenue 389.7 billion yen  
Operating profit (Ratio): 27.1 billion yen (7.0%)

### [Transform business model through "i<sup>3</sup>-Mechatronics"]

- Establishment of "i<sup>3</sup>-Mechatronics CLUB"
- Strengthened service structure by group reorganization
- Completion of "YASKAWA Technology Center"
- Launched new AC servo, AC drives and integrated controller
- Established i3 DIGITAL Corporation, a joint venture for IoT solutions
- Started robot production in Slovenia

### [Maximizing revenue with expanding "robotics business"]

- Expanded robot lineups (Collaborative robot, SCARA, semiconductors, etc.)
- Strengthened initiatives with market-specific joint venture partners

### [Expand new domains by strengthening resources through "selection and concentration"]

- Reorganized System Engineering business
- Launched new PV inverters

### [Enhancement of management foundation]

- Establishment of Sustainability Policy
- Unified global data and promoted integration of business processes
- Introduction of flexible working styles such as remote work

<sup>\*1</sup> Yaskawa's new business creation scheme (See P.34 of YASKAWA Report 2019)

<sup>\*2</sup> A target of reducing CO<sub>2</sub> emissions through Yaskawa products by 100 times or more of the CO<sub>2</sub> emissions of the Group by FY2025

## Solution Concept “i<sup>3</sup>-Mechatronics”

We will accelerate the evolution of production, sales, and technology, and contribute to the resolution of customer management issues through cross-business initiatives.

Yaskawa launched the solution concept “i<sup>3</sup>-Mechatronics” in 2017.

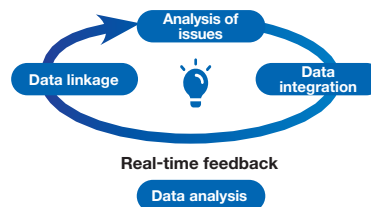
The three “i”’s, “integrated,” “intelligent,” and “innovative” of the i<sup>3</sup> (i cube) are concepts that contribute to solving customers’ management issues and transform the company’s business model.

### Strengthen manufacturing functions to demonstrate “i<sup>3</sup>-Mechatronics”



**Develop concept of  
“YASKAWA Solution Factory”**  
that will transform manufacturing and  
business

### Strengthen sales capability to realize “i<sup>3</sup>-Mechatronics”



**Offer optimal solutions**  
through communication with customers  
including top management



### Develop technologies/products to realize “i<sup>3</sup>-Mechatronics”



**Develop technologies and products**  
that accurately meets customer needs  
**timely by integrated  
development functions**

### Strengthen service businesses through demonstration of “i<sup>3</sup>-Mechatronics”



**Develop new services**  
that contribute to improving customers’  
production efficiency

IT

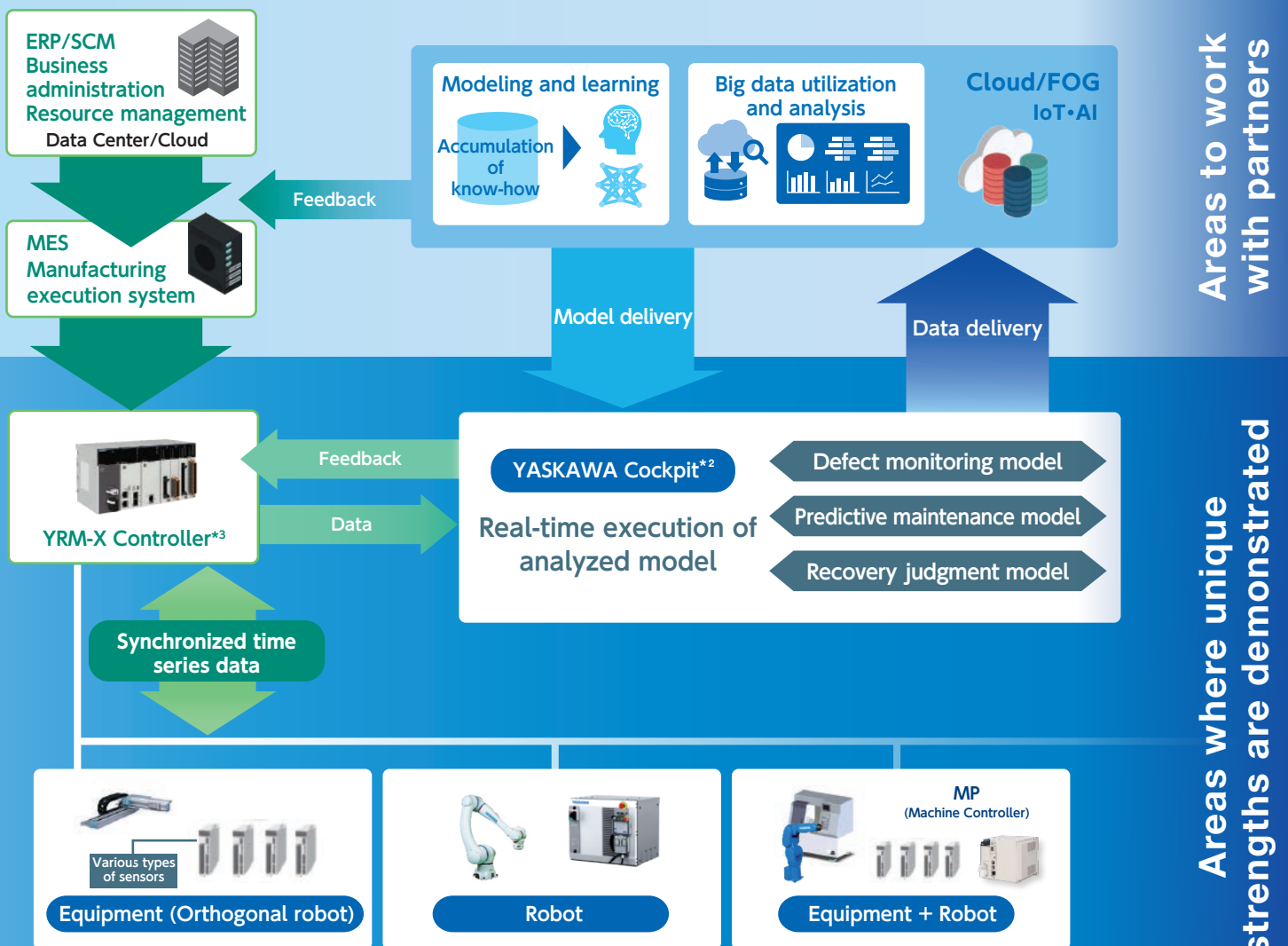
FA (Edge<sup>\*1</sup>)

Digital data  
management



Automation of  
manufacturing

By making the most of YASKAWA Solution Factory and YASKAWA Technology Center (YTC) and implementing the “i<sup>3</sup>-Mechatronics” concept through data integration and analysis through YASKAWA Digital Transformation (YDX,) we provide solutions that meet customer needs.



\*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



# Message from the President

The Yaskawa Group is Committed to Building a Business Model that will Contribute to the Development of a Sustainable Society while Devoting Ourselves to Being “a Company Founded on Technology.”

Representative Director  
President

*R. Gasawara*

## Summary of FY2020

### Major progress toward shoring up our corporate structure

For the past year and a half, we have been at the mercy of the threat of COVID-19 (hereafter, COVID.) I would like to express my heartfelt gratitude to all those who support our lives, including those who are struggling in the harsh medical field.

This crisis caused by COVID is different in nature from the crisis that once had a huge impact on the economy. The Lehman Shock stopped the flow of money, and the trade friction between the United States and China stopped the flow of goods. In contrast, the flow of people stopped in COVID crisis. However, despite temporary stagnation in the manufacturing field, the situation quickly normalized due to large-scale monetary easing. As a result, in FY2020 we were able to maintain plant operations and fulfill our supply responsibilities, paying close attention to infection control to protect the safety of our employees. Even before the crisis caused by COVID, we worked to improve our profit structure by strengthening cost management and reforming the way we work. Learning from this crisis helped us accelerate our evolution to a company that can generate profits without relying on revenue expansion. As a result, we are confident about the fact that we were able to achieve an increase in operating profit, although revenue declined compared to FY2019.

### Growth story of Yaskawa

#### Securing the profits necessary for the survival and development of the company

Since the 1990s, Yaskawa has been focusing on factory automation (FA,) expanding its business and gradually shifting its focus from quantity to quality. I, who took over the management baton in 2016, further strengthened our quality-oriented management stance by sending out a message throughout the company that "profits are more important than revenue." This is connected to "improving management efficiency and securing profits necessary for the survival and development of the company" in management principle.

I believe that Yaskawa's BtoB business in FA differs from BtoC in that it is a business where customers' profits are

shared. Therefore, the more profit customers make, the more profit Yaskawa will be able to make. If customers can increase their added value by using Yaskawa products and win in the market, they will be able to purchase Yaskawa products at a price commensurate with that value. As customers and Yaskawa generate profits, they invest to win further in the market, and Yaskawa returns profits to its shareholders and employees, as well as implement growth investments, creating a virtuous cycle. Accordingly, Yaskawa's profits are proof that customers value its products. This is a major reason why I focus on profit, and when I think about it, the perspective of "How can we make our customers win?" naturally comes into being, which is the origin of our activities.

Yaskawa's solution concept, "i<sup>3</sup>-Mechatronics," does not focus on a broad range of market needs, but focuses on the cells and equipment inside plants, in order to address the management issues of customers at hand. The establishment of a business model through "i<sup>3</sup>-Mechatronics," YDX (YASKAWA Digital Transformation,) which is the foundation for digital management, and YASKAWA Technology Center (YTC,) which integrates technologies, are all indispensable elements of Yaskawa Group's growth story in order to make our customers win by leveraging the strengths of the Yaskawa Group. Data is the common language required for these activities.

### YASKAWA Digital Transformation (YDX)

#### First year of YDX saw steady progress

FY2020 is positioned as the first year of YDX, and I am taking the lead in promoting it. YDX embodies our strong desire to realize DX for the Yaskawa Group through our own originality and ingenuity, without being misled by the general definition of DX. The first step for YDX is to unify accounting and other codes for approximately 70 consolidated companies. This made it possible to transform operations into cockpits that enable real-time monitoring of consolidated business conditions, including orders, revenue, profits, expenses, production and quality. In the consolidated financial results, data can now be prepared in about one week for quarterly financial results and in about two weeks for interim and final financial results. YDX has achieved its major goals.

The next step is to standardize operations so that



employees can work without taking over at the time of personnel changes. At the same time, we will create a system that allows employees to work autonomously and that enables fair evaluation of their performance. We will make Yaskawa a company that is more rewarding to work for, rather than a company that is easier to work for, and this will lead to the creation of a corporate culture that is unique to Yaskawa. Furthermore, while sharing data with suppliers and cooperating companies to improve production efficiency, we provide solutions directly linked to solving customers' management issues, such as reducing defective products and improving utilization rates, by linking customers' product lifecycles, including after-sales service, with data. This data is then fed back to the development team to improve product quality.

## **Strategic significance of YASKAWA Technology Center (YTC)**

### **Integration of technologies as a final step for "i<sup>3</sup>-Mechatronics" in the company**

Since 2017, we have been promoting the "i<sup>3</sup>-Mechatronics" solution concept by integrating production, sales, service and data. YTC, which integrates technologies, is the final step in this process. The building was completed in March 2021, and full-scale operation began in September.

Since the 1990s, Yaskawa's business has been based on the differentiation by the pursuit of superior functions, performance, and quality of AC servo motor, AC drive, and industrial robots and on the sales of those globally competitive components to customers. In recent years, however, competition for solutions for automation and labor-saving using IoT and AI has intensified, and Yaskawa needs to respond to customer demands by providing total added value by linking cells and equipment through "i<sup>3</sup>-Mechatronics." However, we cannot win the competition when the technical development departments that support it are dispersed and develop common technologies individually. Therefore, YTC was newly established for the purpose of gathering the functions of technology development in one place, not only sharing information by utilizing IT, but also creating an environment that lead to co-creation, and greatly improving technological capabilities and the

speed of development.

In order to promote “profit-oriented” management, it is very important for us to be chosen by customers. We believe that YTC, which integrates technology development and conducts basic research, prototyping, and production line development, as well as open innovation through collaboration with our business partners, will be a place of appreciation not only for our customers but also for the advancement of industry-academia-government collaboration.

## Mid-term business plan “Challenge 25 Plus”

### Leveraging centralized data to improve profitability

The mid-term business plan “Challenge 25,” which was positioned as a step till FY2021 toward realizing long-term business plan “Vision 2025,” has produced steady results, including business model reforms centered on the YDX and “i3-Mechatronics.” On the other hand, due to the major changes in the market environment such as U.S.-China trade friction and COVID crisis, it is difficult to achieve the target of 70 billion yen in operating profit for FY2021. Therefore, we extended the plan period by one year until FY2022 and revised it as “Challenge 25 Plus.” We will maintain our original target of a 13% operating profit ratio and place emphasis on improving profitability. As demand, which had been restrained in FY2020, increases in momentum, we will strive to meet our targets by steadily capturing demand in growth markets such as automobiles, 5G, and semiconductors, while maintaining and strengthening the robust earnings structure established in COVID crisis. I believe that the integration of global data created by YDX will be very effective.

## Toward sustainable enhancement of corporate value

### Pursuing sustainability steadily

The Yaskawa Group’s passion for “contributing to the development of society and the welfare of humankind through the execution of business” which is management principle, has been handed down from generation to generation since its foundation more than 100 years ago,

and we consistently strives to improve Yaskawa’s corporate value by solving social problems and contributing to sustainable growth.

Since FY2021, the company has formulated policies and specified sustainability issues and targets (materiality) under the newly established Sustainability Committee. The purpose of this is also to provide stakeholders with a clearer understanding of Yaskawa’s policies and activities, while global efforts to address social issues, including the United Nations’ Sustainable Development Goals (SDGs) and the Paris Agreement, which is the framework for global warming countermeasures, are accelerating in recent years.

One of the most important sustainability issues is human resource development. Yaskawa’s founder established the Meiji Senmon Gakko (current Kyushu Institute of Technology) in 1909 to train personnel. Since then, we have created a cycle in which we contribute to the local community through human resource development, and the human resources contribute to the development of the local community and the sustainable growth of Yaskawa. We intend to promote this virtuous cycle not only in Japan but also globally. We are also steadily fostering the next generation of executives who will succeed management principle and continue to evolve and grow.

As with YDX, Yaskawa’s sustainability is not influenced by the current of the times, and our unique approach is based on whether it contributes to the sustainability of the enhancement of corporate value.

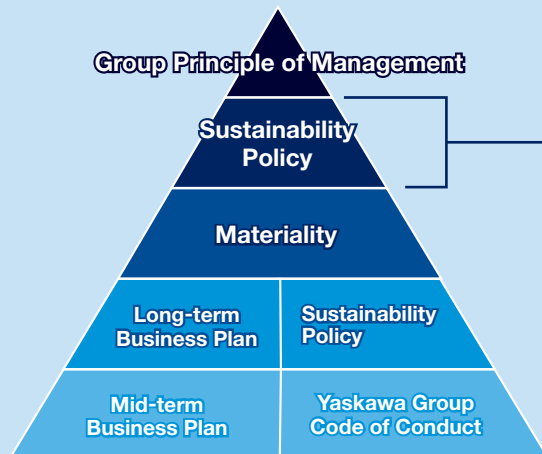
Yaskawa’s corporate motto at the time of its founding was “a Company Founded on Technology.” It is intended to support the advanced industries of the times with our own technologies, not with imitation. It is also my responsibility to pass on this founding spirit as a corporate culture. I am determined to meet the expectations of our shareholders, investors, and other stakeholders with the attitude to always make positive progress while keeping my passion alive as president.

I appreciate your continued support as we move forward.

## Strengthening the Sustainability Promotion System

Based on the Group Principle of Management, Yaskawa Group has formulated the Sustainability Policy to accelerate efforts to realize a sustainable society and increase corporate value. In order to achieve this, we will promote sustainability strategically by identifying materiality and developing targets for long-term and mid-term business plans. We have also established various sustainability policies. We will continue to review our materiality and policies on a regular basis, taking into account the needs of the internal/external environment.

### ► Sustainability Promotion System



### Sustainability Policy

We will strive to realize a sustainable society and increase corporate value through the implementation of the Yaskawa Group Principle of Management which is to leverage the pursuit of our business to contribute to the advancement of society and the well-being of humankind.

1. We will contribute to the value creation for customers and society through creating innovation by cutting-edge mechatronics technologies.
2. We will realize fair and transparent corporate management through communication and collaboration with stakeholders around the world.
3. We will work to resolve social issues globally with the aim of achieving SDGs as a universal goal.

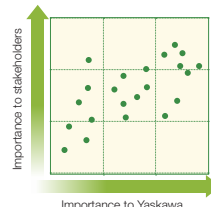
### ► Identifying Materiality

#### STEP 1 List of issues

We made a comprehensive list of social issues related to Yaskawa's sustainable growth from the environmental, social and economic perspectives, referring to international frameworks and guidelines such as the SDGs and GRI standards, as well as macroeconomic trends in areas related to Yaskawa.

#### STEP 2 Assessment and identification of issues

For the issues identified in STEP 1, we selected items of high importance centering on "importance to stakeholders" and "importance to Yaskawa." In addition, discussions were held at internal meetings, including the Board of Directors, and issues of particular importance were identified as sustainability issues and targets.



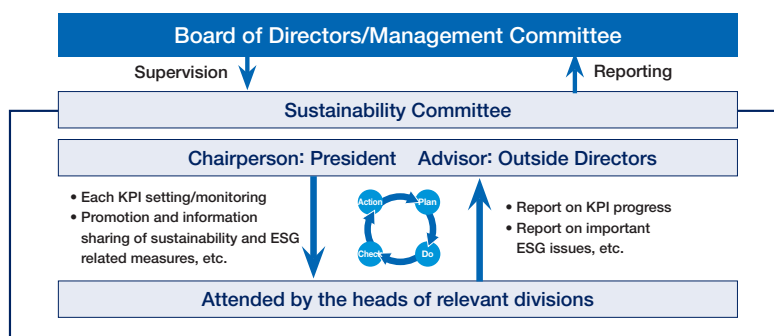
#### STEP 3 Planning measures for issues (setting KPIs)

The high-priority issues identified in STEP 2 are divided into two axes: "Create Social Value and Solve Social Issues through Business Activities" and "Strengthen Management Foundation that Contributes to Sustainable Society/Businesses," reflecting the opinions expressed at internal meetings.

We have also clarified the direction of each focus area and strategy, and set quantitative and qualitative KPIs.















### Strengthening the PDCA system through the Sustainability Committee

Yaskawa Group established the Sustainability Committee in April 2021, which is chaired by the president. As a general rule, this committee meets twice a year to promote the sustainability of the Group. In addition to the heads of divisions who promote materiality measures, the heads of headquarters divisions who are involved in the promotion of sustainability participate, as well as outside directors who serve as advisors. In addition, we promote the planning, deliberation, group-wide development, and monitoring of key measures and policies related to materiality and corporate sustainability.



The first Sustainability Committee meeting was held in May 2021. A total of 21 people, 17 from inside the company, including the President who chairs the committee, and 4 outside directors, participated in the meeting and actively discussed KPIs related to each materiality.

## ► Yaskawa Group's Sustainability Challenges and Targets (Materiality)

Sustainability Challenges and Targets (Materiality)	Initiatives [Targets]	Related SDGs
Create Social Value and Solve Social Issues through Business Activities		
① Realize revolutionary industrial automation with our partners through “i <sup>3</sup> -Mechatroncis”	<ul style="list-style-type: none"><li>Accumulation of “i<sup>3</sup>-Mechatroncis” project success cases</li></ul>	
② Build clean social infrastructure and foundation for safe and comfortable living	<ul style="list-style-type: none"><li>Achieve CCE 100 (Contribution to Cool Earth 100)*<sup>1</sup> [FY2025: 100 times]</li><li>Expanding examples of mechatronics technology applications</li></ul>	   
③ Develop new technologies and business domains through open innovations	<ul style="list-style-type: none"><li>Strengthen initiatives in new areas through M &amp; A and alliances</li><li>Reinforcement of Industry-Academia-Government collaboration</li><li>Expansion of venture investments by YIP*<sup>2</sup></li></ul>	
Strengthen Management Foundation that Contributes to Sustainable Society/Businesses		
④ Sustainable and productive manufacturing		
<ul style="list-style-type: none"><li>Introduction of cutting-edge manufacturing</li></ul>	<ul style="list-style-type: none"><li>Improvement of production efficiency at in-house plants (improvement of productivity index*<sup>3</sup>) [FY2022: + 17% FY2025: + 23% (compared to FY2019)]</li></ul>	  
<ul style="list-style-type: none"><li>Reduction of greenhouse gas emission through the Green Process</li></ul>	<ul style="list-style-type: none"><li>Reduction of greenhouse gas (CO<sub>2</sub>) emissions [FY2025: - 18% (compared to FY2018)]</li></ul>	
<ul style="list-style-type: none"><li>Improvement of product safety and quality</li></ul>	<ul style="list-style-type: none"><li>Improving product quality through the introduction of new systems [FY2022: Start of global operation of market quality information centralized system]</li></ul>	
<ul style="list-style-type: none"><li>Construction of a sustainable supply chain</li></ul>	<ul style="list-style-type: none"><li>Improving the rate of compliance with Sustainable Procurement Guidelines [FY2022: Compliance rate: 50% (target: major suppliers of Yaskawa Electric) FY2025: Compliance rate: 100% (target: major suppliers of Yaskawa Group)]</li></ul>	
⑤ Create a rewarding workplace and human resource development		
<ul style="list-style-type: none"><li>Diversity and inclusion</li></ul>	<ul style="list-style-type: none"><li>Raising the ratio of female managers [FY2025: Non-consolidated/Group in Japan: Double (compared to FY2021)]</li></ul>	   
<ul style="list-style-type: none"><li>Human resource development</li></ul>	<ul style="list-style-type: none"><li>Increase the ratio of professional human resources*<sup>4</sup> [FY2025: Double (compared to FY2021) Construction of new human resources development curriculum]</li></ul>	
<ul style="list-style-type: none"><li>Occupational safety</li></ul>	<ul style="list-style-type: none"><li>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]</li></ul>	
<ul style="list-style-type: none"><li>Human rights and work practices</li></ul>	<ul style="list-style-type: none"><li>Implementation and establishment of human rights due diligence (DD) processes for employees [FY2022: Implementation of human rights DD for group companies in Japan FY2025: Implementation at all global sites]</li></ul>	
<ul style="list-style-type: none"><li>Contribution to local communities</li></ul>	<ul style="list-style-type: none"><li>Development of human resources in science and engineering who will realize “evolution of manufacturing” [FY2022: Launch of a new manufacturing human resource development program]</li></ul>	
⑥ Fair and transparent governance system		
<ul style="list-style-type: none"><li>“Aggressive” governance system utilizing the Corporate Governance Code</li></ul>	<ul style="list-style-type: none"><li>Implementation of the Principles of the Corporate Governance Code (Reasonable explanation where not implemented)</li></ul>	
<ul style="list-style-type: none"><li>Strengthening of information security</li></ul>	<ul style="list-style-type: none"><li>Improving the level of information security through the use of external auditing organizations</li></ul>	
<ul style="list-style-type: none"><li>Enhancement of compliance</li></ul>	<ul style="list-style-type: none"><li>Strengthen compliance through internal reporting</li></ul>	

\*1 A target of reducing CO<sub>2</sub> emissions through Yaskawa products by 100 times or more of the CO<sub>2</sub> emissions of the Group by FY 2025

\*2 Abbreviation of Yaskawa Innovation Program. New business creation scheme with CVC functions launched in FY2016

\*3 Revenue per person for indirect and direct personnel at plants in Japan (compared to FY2019)

\*4 Refers to human resources who have a rating of 3 or higher on a four-point scale in accordance with company rules



# Message from the Management

**We Aim to Maximize Corporate Value by Promoting Sustainable Management.**

Representative Director, Senior Managing Executive Officer,  
In charge of CSR, In charge of Administration,  
General Manager, Corporate Planning Div.

**Shuji Murakami**

### **Establishing a management foundation resistant to environmental changes**

In FY2020, revenue declined due to the impact of the global spread of the COVID-19, but operating profit increased as we managed to reduce costs by approximately 10 billion yen compared to FY2019, thanks to cost controls we had been working on since before the COVID crisis.

In FY2021 and beyond, we plan to increase both revenue and profits as the market environment recovers. As for expenses, although strategic investments such as depreciation and amortization of the newly established YASKAWA Technology Center (YTC) and the YDX (YASKAWA Digital Transformation) project will increase, we will keep expenses for other activities within 10% of revenue's increase, thus maintaining a robust cost structure.

I believe that the most important thing for a company to do in response to the recent uncertain business

environment is to quickly steer management. "YDX," which is being worked on by the entire company, is expected to raise the level of management of each group company by enabling the centralized management of global data. In addition, we are striving to improve profitability through multifaceted initiatives such as business model reform based on "i<sup>3</sup>-Mechatronics" and IT-based work style reform, and to build a flexible management foundation that is resilient to environmental changes.

### **Capital policy and contribution to a sustainable society**

In terms of capital efficiency, assuming a cost of equity of approximately 10%, we aim to achieve at least 15% of ROE and ROIC in our mid-term business plan.

At present, the capital structure is in an ideal state, but our basic policy is to secure financial safety by controlling the net debt-to-equity ratio to a certain level. At the same

time, we will seek to maximize returns and improve capital efficiency by appropriately utilizing leverage.

For a FA-related company like Yaskawa, fluctuations in demand in specific markets are inevitable, but we will strive to diversify risks as much as possible by expanding our market and customer base and developing new business models, in order to reduce capital costs.

In June 2021, Yaskawa procured funds through green bonds for the construction of the YTC, for the first time. In the future, we will continue to make the best use of the procurement format that utilizes the evaluation of ESG initiatives to reduce capital and procurement costs and contribute to the construction of a sustainable social system.

## Accelerating the expansion of sustainable businesses through mechatronics technology

COVID crisis's significant environmental changes are forcing people to change their sense of values. In this era, it is important to return to management principle, which is the foundation of Yaskawa, and to use Yaskawa's strengths to resolve new social issues.

From the perspective of risk elimination and stable production, Yaskawa will continue to accelerate factory automation, which is one of its strengths. In Yaskawa's solution concept "i3-Mechatronics," we will expand our business domain by providing digital data solutions to our component products and strategically developing collaboration with partners in the automation field. In particular, through these efforts, we will strive to take advantage of automation in the areas of food preparation and agriculture, where labor shortages are a concern, as a major opportunity for further growth.

In addition, we will accelerate the expansion of sales of green products such as AC drives as well as PV inverters for solar power generation and electrical products for wind power generation, thereby contribute to a reduction of 100 times of our own CO<sub>2</sub> emissions also by promoting green processes through energy conservation and the use of renewable energy in Yaskawa production activities.

In addition, through joint ventures, industry-academia-government collaborations, and venture investment, we will apply Yaskawa technology to new fields and aim to contribute to solving social issues. We will also promote further growth by providing feedback on the knowledge we have gained in these fields to our core businesses and by refining our technologies.

## Toward the instillation of sustainable thoughts

In recent years, climate change and abnormal weather caused by global warming have come to be felt in our daily lives, and a sense of crisis about the sustainability of the global environment is a pressing issue. Under these circumstances, Yaskawa Group has formulated its Sustainability Policy and declared its intention to accelerate the promotion of sustainable business both internally and externally. As a result, we will firmly establish sustainable thoughts based on management principle as Group's corporate culture. We believe that even if the business environment and management system change, this philosophy will remain universal and will be the foundation for the future. We also incorporated actions to address sustainability issues and targets (materiality) into our mid-term business plan "Challenge 25 Plus," and are working to achieve this in a strategic manner.

Yaskawa Group is proud to be a "company founded on technology" and will continue to strive to create social value through its business based on mechatronics technology. In addition, we will promote "*global* management" rooted in each local community, such as the development of "manufacturing human resources" at each business site that has expanded globally, and promote activities that contribute to each local community from a long-term perspective. We place importance on dialogue with a wide range of stakeholders, practice highly transparent management that is trusted, and contribute to the sustainability of society through our business and corporate activities.

We look forward to your continued support for the sustainable growth of Yaskawa in the future.

## We Accelerate Decarbonization Efforts through Production Activities (Green Processes) and Products (Green Products)

Introduction on how Yaskawa Group will improve its corporate value through the promotion of environmental management, including the establishment of “2050 CARBON NEUTRAL CHALLENGE” and information disclosure based on TCFD recommendations (hereafter, TCFD information disclosure.)



Director, Managing Executive Officer,  
General Manager, Production  
Management & Operations Div.,  
General Manager, Export & Import  
Administration Div.

**Yoshikatsu Minami**

### Yaskawa's environmental management

In the Paris Agreement agreed at the 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 21) in December 2015, the international goal of keeping the increase in global average temperature from pre-industrial levels to 1.5°C while keeping it well below 2°C was set. In October 2020, Japan declared that it would aim for carbon neutrality by 2050, and companies are required to show goals and directions to be achieved in response to global warming. In response to that, Yaskawa Group's environmental vision, YASKAWA ECO

VISON, promotes environmental management toward decarbonization by reducing environmental impact through production activities (green processes) and reducing the environmental impact of society through the supply of Yaskawa products (green products.)

In green processes, we are promoting energy conservation and energy creation measures in production activities. For example, we are saving energy by actively using our own equipment such as AC drive and power regeneration converters. In addition, we installed solar panels on the rooftops of each facility, with a total generating capacity of approximately 2.5 MW (February 2021.) Furthermore, as of May 2021, approximately 43% of the total electricity demand of Yaskawa Group's

production activities in Japan was covered by renewable energy, as a result of introducing 100% renewable energy into the three main domestic sites (Yahatanishi, Nakama, and Kokura.)

At the same time, green products have contributed to the reduction of CO<sub>2</sub> emissions by efficiently driving motor drives through the supply of Yaskawa's main products such as AC drive and IPM motors. We also supply equipment necessary for renewable energy generation, such as PV inverter for solar power generation and electrical appliances for wind power generation. The amount of CO<sub>2</sub> emissions reduced through sales of these products on a global scale totaled approximately 35 million t-CO<sub>2</sub> over 5 years from FY2016 to FY2020. This is equivalent to greening an area of approximately 29,000 km<sup>2</sup> (approximately 6 times the area of Fukuoka Prefecture.)

In addition, in order to promote sound environmental management, the degree of achievement of the target of reducing CO<sub>2</sub> emissions through Yaskawa products is adopted as one of the indicators for calculating the stock compensation of Yaskawa directors.

### **“CCE 100,” a unique index that combines green processes and green products**

Recognizing that the response to climate change is an urgent global issue, Yaskawa Group has established its own index for CO<sub>2</sub> emission reduction efforts called “CCE 100 (Contribution to Cool Earth 100.)” This is a unique indicator with the goal of contributing to 100 times or more reduction in CO<sub>2</sub> emissions through products sold by Yaskawa Group, compared to annual CO<sub>2</sub> emissions from Yaskawa Group's production activities, and is targeted for achievement by FY2025.

In FY2019, the index was about 75 times, but in FY2020 it was only about 63 times because the revenue of green products decreased due to the spread of the novel coronavirus infection and other factors.

In Yaskawa Group, IoT, AI, and big data are utilized through “i3-Mechatronics” to reduce production lead times, improve utilization rates, and contribute to improving productivity. By doing so, we believe that energy consumption per unit of production at plants will be reduced, leading to a reduction in CO<sub>2</sub> emissions at the Yaskawa Group's and our customers' plants.

### **Efforts toward decarbonization (Carbon neutral and TCFD information disclosure)**

As a long-term goal for decarbonization, in March 2021, Yaskawa Group set a goal of substantially zero CO<sub>2</sub> emissions (2050 CARBON NEUTRAL CHALLENGE) from its global business activities in 2050. As a milestone, a goal to reduce CO<sub>2</sub> emissions in FY2030 by 36% from the FY2018 level was also set. In FY2020, we achieved a 10% reduction from the FY2018 level and are making steady progress. (For details, see “Natural Capital” on page 43 and 44.)

In September 2019, we expressed our support for the philosophy of the Task Force on Climate-related Financial Disclosures, and in May 2021 we disclosed TCFD information (See pages 23 and 24 for details.) When we analyzed the impact of climate change on Yaskawa Group, we came to the conclusion that revenue growth in products and solutions related to energy conservation, productivity improvement, and renewable energy power generation was greater than revenue decline due to increased risks such as abnormal weather and resource shortages.

In light of this, we will continue to take concrete measures to address the identified risks, while also seeing various global responses to climate change as a great opportunity to expand our business, thereby achieving both contribution to the environment and our own growth.

### **Future environmental management to improve corporate value**

Environmental initiatives are becoming increasingly important as a requirement for being a company that is chosen by customers and other stakeholders. Yaskawa Group will promote the introduction of renewable energy-derived electricity to its other business sites in Japan (including the Iruma and Yukuhashi Plants,) with the aim of meeting all of the Group's total electricity demand in Japan with renewable energy by FY2030. In addition, by continuously investing in the environment with a portion of profits and promoting initiatives for decarbonization, we will realize sustainable operations on a global scale and the sustainable improvement of corporate value.

## Disclosure of Climate Change-Related Information Based on TCFD<sup>\*1</sup> Recommendations

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 have disclosed information related to climate change based on the TCFD Recommendations.

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.

### Governance

Based on our sustainability policy<sup>\*2</sup>, 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<sup>\*3</sup> 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<sup>\*4</sup>, 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 (see table on page 26) with a moderate and serious impact were analyzed with 2°C and 4°C scenarios for society in 2030.

As a result, the 4°C scenario assumes carbon reductions have not gone ahead and unusual weather intensifies, so the response to physical risks caused by this are considered the most important challenges.

The 2°C scenario also requires a certain response to the intensification of unusual weather, but the response to the rising cost of

materials and resources is more important. On the other hand, we understand that 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.

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."

<sup>\*1</sup> TCFD (Task Force on Climate-related Financial Disclosures) : The task force was set up by the Financial Stability Board (FSB: Financial Stability Board) in December 2015, an international organization for stabilizing the financial system. In June 2017, it published a proposal for "Supporting companies that disclose information on climate-related risks and opportunities" and "Stabilize financial markets through a smooth transition to a low-carbon society."

<sup>\*2</sup> Sustainability Policy: <https://www.yaskawa-global.com/company/csr/group/policy>

<sup>\*3</sup> Sustainability Promotion System: <https://www.yaskawa-global.com/company/csr/group/promotion>

<sup>\*4</sup> Organization for Environmental Promotion: <https://www.yaskawa-global.com/company/csr/env/management>

## 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 low-carbon 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. • 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\*5: SDS\*6, STEPS\*7
- Used mainly to analyze physical risks: IPCC\*8: RCP2.6\*9, RCP8.5\*10

\*5 International Energy Agency

\*6 Sustainable development scenario

\*7 Stated policies scenario

\*8 Intergovernmental panel on climate change

\*9 Scenario in which the average temperature of the world rises about 2°C over the average temperature before the industrial revolution

\*10 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 company-wide 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>\*11 emissions (scope 1\*12 + scope 2\*13) 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 36% in 2030 compared to 2018. 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\*14," 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.

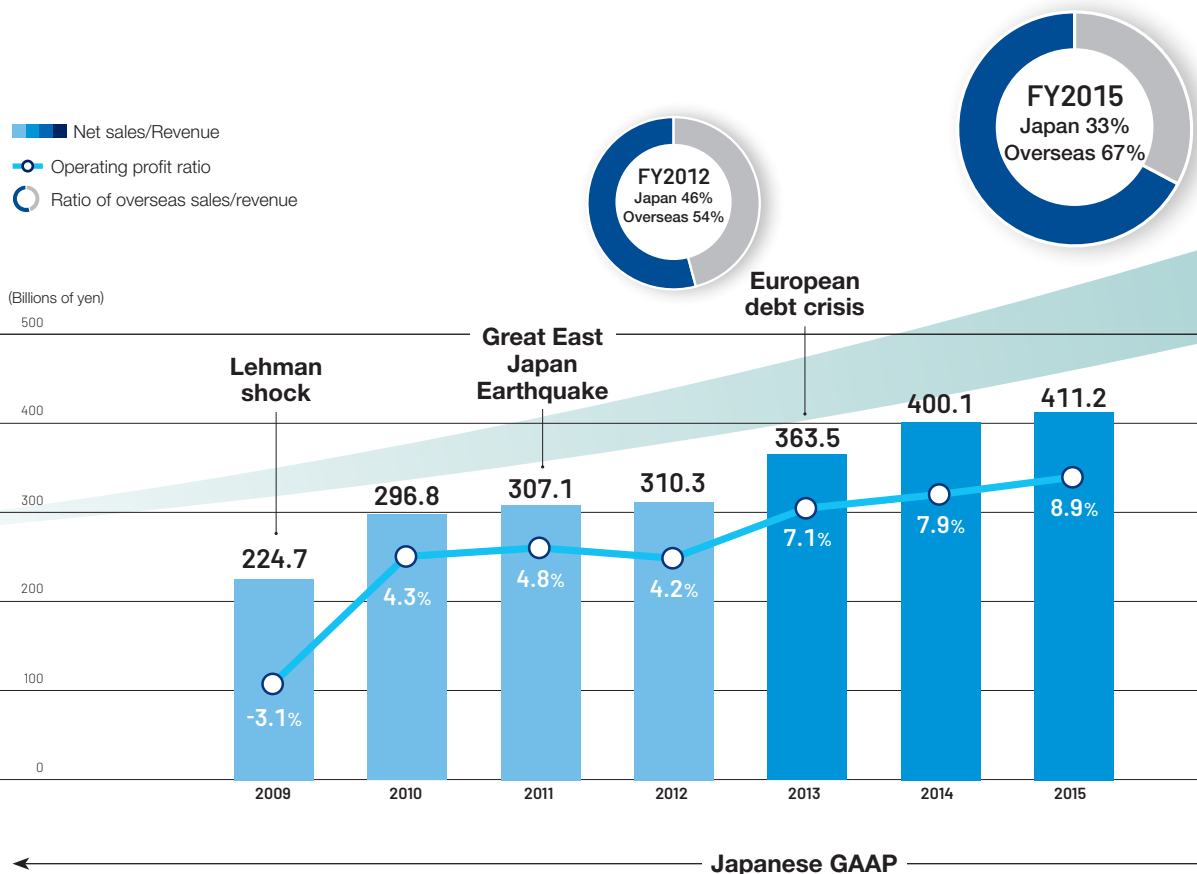
Taking this opportunity to set new targets, we will continue our business activities with greater consideration for the environment, thereby contributing to the realization of a sustainable society and increasing our corporate value.

\*11 Including carbon dioxide and other greenhouse gases (e.g., chlorofluorocarbon) \*12 Emissions primarily from using fuels (direct emissions)

\*13 Emissions from using purchased electricity and heat (indirect emissions by power companies and other entities) \*14 Contribution to Cool Earth 100

## Review of Mid-Term Business Plans

As part of our medium- to long-term business plan, we have strengthened our core businesses and promoted initiatives for new businesses. At the same time, we have built a global management structure that is resistant to changes in the market environment and foreign exchange fluctuations. We will contribute to the creation of a sustainable society through our mechatronics technologies and accelerate global growth.



### Challenge 100

(FY2009 – FY2012)

#### Expansion of Mechatronics Business Areas

##### Results

- Developed new markets in the robot business, such as food manufacturing and biomedical markets
- Expanded environmental and energy businesses, particularly in PV inverter
- Expanded overseas production and sales networks, particularly in China
- Reinforced sales capabilities through mergers and acquisitions

##### Challenges

- Timely launch of competitive products in each region
- Improve market responsiveness by further shifting resources to demand areas
- Improving the profit structure of existing businesses

### Realize 100

(FY2013 – FY2015)

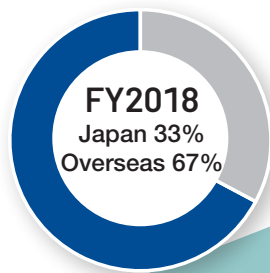
#### Realization of *Glocal* Management

##### Results

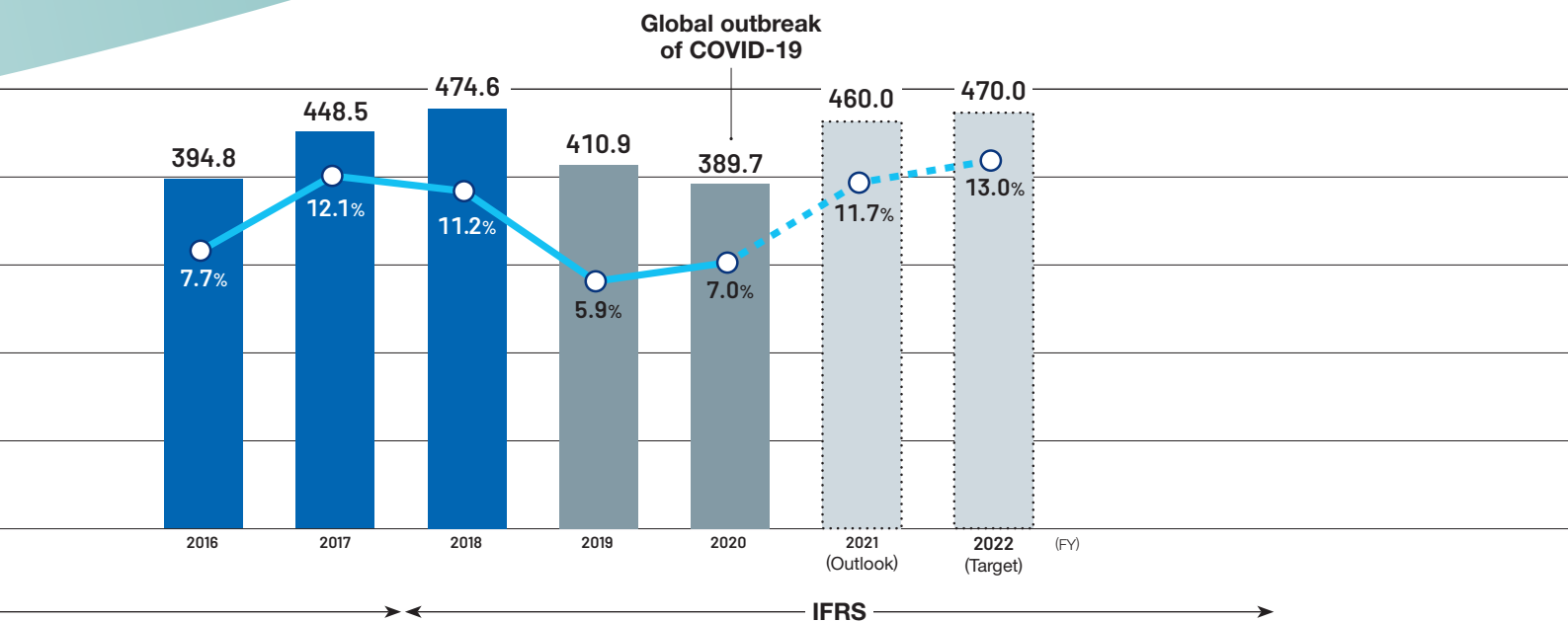
- Raised the ratio of overseas revenue and the ratio of local production in demand areas
- Doubled the number of local development engineers
- Implemented M&A in Clean Power business areas (wind power generation/ photovoltaic power generation)
- Improved profitability by launching and switching to AC servo drive  $\Sigma$ -7 series

##### Challenges

- Increase profitability in core businesses
- Continual evolution of development, production and sales capabilities
- Accelerating the establishment of corporate foundations
- Expanding Clean Power business and reaping investment



**FY2025**  
Operating profit  
**100 billion yen  
or more**



## Dash 25

(FY2016 – FY2018)

## Challenge 25 Plus

(FY2019 – FY2022)

### Establishment of A Highly Profitable Corporate Structure

#### Results

- Launched new solution concept “i<sup>3</sup>-Mechatronics”
- Strengthened sales capabilities through integration of sales functions
- Expanded sales and lineup of core products
- Expanded production in demand areas, mainly in China and Europe
- Expanded revenue and profitability of electrical products for large-scale wind power generation

#### Challenges

- Establish competitive advantage of Yaskawa products and services in the automation field
- Creating businesses based on “i<sup>3</sup>-Mechatronics”
- Building a stable earnings structure for the Clean Power business

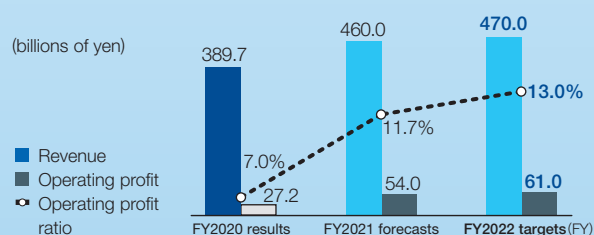
## Accelerating Profitability Improvements, Centered on “i<sup>3</sup>-Mechatronics,” toward the Realization of “Vision 2025”

In April 2021, Yaskawa revised its plan by extending the final year of mid-term business plan “Challenge 25” (FY2019 – FY2021) by 1 year and announced mid-term business plan “Challenge 25 Plus” (FY2019 – FY2022.) Amid significant changes in the market environment as a result of the spread of the novel coronavirus infection, the Company will implement activities based on Yaskawa Sustainability Policy into its management strategy and work to further improve measures to achieve the goals set forth in its long-term business plan “Vision 2025.”



### “Challenge 25 Plus” Financial Targets

In light of the significant changes in the market environment caused by the COVID-19, new targets for “Challenge 25 Plus” were set at 470 billion yen for revenue, 61 billion yen for operating profit, and 13.0% for operating profit ratio. By expanding our business through the implementation of “i<sup>3</sup>-Mechatronics” and increasing efficiency through YDX, we will seek to increase profitability toward the target of 100 billion yen operating profit in “Vision 2025.”



	FY2020 results	FY2021 forecasts <sup>*3</sup>	FY2022 targets
ROE <sup>*1</sup>	8.0%	15.5%	15.0% or more
ROIC <sup>*2</sup>	7.0%	14.3%	15.0% or more
Dividend payout ratio	33.1%	33.2%	30.0%+α

<sup>\*1</sup> ROE : Return on Equity = Profit attributable to owners of parent/ Equity attributable to owners of parent  
<sup>\*2</sup> ROIC : Return on Invested Capital = Profit attributable to owners of the parent/Invested capital  
<sup>\*3</sup> Forecasts as of the announcement of financial results for the first quarter of FY2022 (July 9, 2021)

### Basic Policy

#### Basic Policy 1 Transform Business Model through “i<sup>3</sup>-Mechatronics”



Contribute to solving customers' management issues through cross-business initiatives with evolution of manufacturing, sales and technology.

##### Strengthen manufacturing functions to demonstrate “i<sup>3</sup>-Mechatronics”



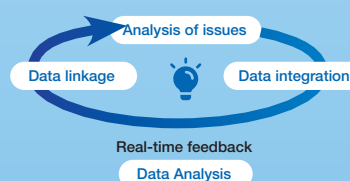
Expand “YASKAWA Solution Factory” concept globally to realize efficient and optimal manufacturing.

##### Develop technologies/product development to realize “i<sup>3</sup>-Mechatronics”



Accelerate global development across businesses by building an integrated development structure at “YASKAWA Technology Center.”

##### Strengthen sales capability to realize “i<sup>3</sup>-Mechatronics”



Aim to expand solutions that realize “i<sup>3</sup>-Mechatronics” and strengthen our capabilities to offer solutions that increases added value of customers.

##### Strengthen service businesses through demonstration of “i<sup>3</sup>-Mechatronics”



Contribute to improving customer's production efficiency by offering new data services based on predictive diagnostics.

## Basic Policy 2 Maximize Profitability in the Growing Market through “i<sup>3</sup>-Mechatronics”



We define the automation domain of various industries, including robots, as the “robotics market,” and accelerate business expansion by utilizing open innovation in each market where high growth is expected.

Specifically, we will strengthen our presence in the Chinese and Asian markets centered on the 3C\*<sup>4</sup> and New Infrastructure\*<sup>5</sup> markets, and accelerate initiatives with completed vehicle and component manufacturers in

the automobile-related markets, where Yaskawa Group excels. In addition, we aim to maximize earnings by strengthening initiatives in the semiconductor manufacturing equipment market, where further growth is expected.

\*4 3C: Abbreviations for consumer and digital communications equipment (from the acronyms Computer, Communication and Consumer Electronics)

\*5 New Infrastructure: Digitization of industries in China, focusing on seven fields, including next-generation communications standards such as 5G, new energy vehicles, and AI

## Basic Policy 3 Expand New Domains for Building a Sustainable Society



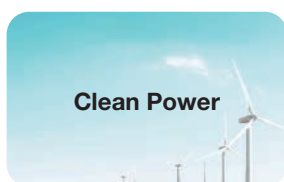
Yaskawa will contribute to the realization of a sustainable society in areas where it can take advantage of its world-renowned mechatronics technologies.

### ▶ Energy Saving & Clean Power

We will take on the challenge of technological innovation to realize carbon free society and change the future through products utilizing the industry's top-level power conversion. Through these efforts, our goal in FY2025 is to reduce CO<sub>2</sub> emissions by 100 times of the amount emitted by Yaskawa group (CCE100\*<sup>6</sup>.)



Energy Saving



Clean Power

## SUSTAINABLE DEVELOPMENT GOALS



Food & Agriculture



Humatronics

### ▶ Food & Agriculture

We will contribute to stabilization of food supply by applying industry leading automation technologies to food production processes and agriculture.

### ▶ Humatronics\*<sup>7</sup>

We will support people's health and lifestyles by establishing a business model to respond to demand for automation in the medical and welfare field.

\*6 CCE100 (Contribution to Cool Earth 100): Target to reduce CO<sub>2</sub> emissions from our products by more than 100 times of the amount emitted by Yaskawa by 2025

\*7 Humatronics: A coined term combining “human” and “mechatronics”

## Strengthening Management Foundation

By promoting digital management and quality management, we will unify management data and standardize business processes. We will strengthen the integrated management of the Group on a global basis, speed up management

decisions, and thoroughly improve management efficiency through YDX. In addition, we will promote and strengthen sustainable management that meets the expectations of society and achieve sustainable growth.

### 1 Improve Management Efficiency through YDX

Promote “visualization of data” and “creation of a rewarding workplace” to improve our management structure that is resilient to market changes accelerated by COVID-19.

- **Sophisticated business management** – Enhancement of added value through visualization of management data
- **Improve productivity** – Efficiency improvement through visualization of business data
- **Work style reform** – Realize flexible and diverse working styles
- **Awareness reform** – Enhance employee job satisfaction

### 2 Strengthen Management Foundation that Contributes to Sustainable Society/Businesses

We will implement sustainable management that meets the expectations of our diverse stakeholders and strive to create social value and solve social issues.

- **Sustainable and productive manufacturing**
- **Create a rewarding workplace and human resource development**
- **Fair and transparent governance system**



## Special Feature: Enhancing Development Capabilities

Managing Executive Officer,  
General Manager,  
Corporate Technology Div.

**Akira Kumagae**



### Enhancing Our Development Capabilities with YASKAWA Technology Center (YTC), Our New R & D Center that Integrate People and Data.

We are committed to the development of the world's first and most advanced technology by consolidating the data and engineers that had been distributed to each location, realizing innovative and efficient development, and strengthening cooperation with external partners.

#### **YTC's keyword is "integration"**

Since its founding in 1915, Yaskawa has relied on its technological prowess as the source of its reputation among customers. As a result of the evolution of technologies in response to the changing needs of the times, from coal mines to steel manufacturing, social infrastructure, and from automobiles to semiconductors, Yaskawa products boast world-class performance and quality and have earned the trust of customers. We will continue to focus on motors and their applications in the future, but we must continue to make further progress by developing technologies and products that move like human hands and arms. By making Yaskawa products easy to use for non-specialist engineers and by linking AC servo drive, AC drive,

robots, sensors, etc., we provide total solutions that solve customers' problems at various manufacturing sites. YASKAWA Technology Center (YTC), which was opened in March 2021, will further enhance the technology. By aggregating and accumulating data as well as engineers, we can achieve true efficiency in development.

#### **Enhancing development capabilities through true efficiency improvements**

In the past, development bases for AC servo drive, AC drive, robots, and other products were dispersed, and each company worked with different ways of thinking and rules. As a result, we faced the problem of not being able to share the details of development being

carried out at each base or problems that occurred during development. In addition, because the products produced at each site are different, each technology was independent, so there were a lot of waste and unevenness in terms of the company as a whole, and as competition intensifies on a global scale, we will never be able to win if we continue to do what we have been doing.

At the newly established YTC, engineers are gathered in one place, and various data are collected so that data can be immediately shared and analyzed, such as who is doing what kind of development and experiment, and what kind of evaluation is given to parts and products. When a problem occurs in an experiment, we can easily find a

solution by comparing it with past data. This will not only eliminate waste and unevenness, but also lead to further improvements in product quality.

YTC provides an environment in which people can call out to persons as necessary in technology development, thereby we will achieve true efficiency, dramatically improve our development capabilities, and provide customers with Yaskawa products in a timely manner.

### Accelerate co-creation with external partners

With the increasing need for automation in every industry in recent years, we feel we need to expand into areas that Yaskawa has never been involved in before. To this end, we would like to draw on the expertise of not only Yaskawa but also our customers, partners, and universities. In addition to streamlining development, we will consolidate engineers and data to enhance open innovation involving external partners. When our development centers were scattered, partners didn't know who and where to start discussions to work with Yaskawa. Therefore, we have established the Co-Creation Development Office as an environment in which we can promote development by gathering core development members of YTC and invite outside partners who have an interest in Yaskawa to come to YTC. We prepared an environment with security so that project members and partners can concentrate on development. In March 2021, we became the first in Kyushu to obtain a local 5G radio station license. We will

accelerate joint development with external partners through the latest development environment and streamlined systems to create attractive products.

### Contributing to the resolution of social issues through technology

Since its foundation, Yaskawa has developed technologies that meet the needs of the times, strengthened its global competitiveness, and grown as a manufacturer that supports manufacturing sites. Yaskawa will continue to contribute to solving social problems such as environmental problems and labor shortages caused by a declining birthrate and aging population through its technologies.

We must also boldly take on new challenges. Yaskawa engineers are required to take on new challenges without fear of failure, rather than following traditional methods. There are few walls in YTC facilities. In the same way, it is more important to remove the barriers of mind, deepen exchanges among engineers, and collaborate with various partners both inside and outside the company. Of course, we will continue to focus our business on Yaskawa's core motor technology and its applications. Going forward, we will work to further improve the performance and quality of our robots and controllers by linking them with peripheral technologies. At the same time, we will steadily advance our technologies with the aim of realizing the management principle "contributing to the development of society and the welfare of humankind through the execution of business."

### ▶ YTC floor configuration

	Floor area	Key features
The 4th floor	8,115.73m <sup>2</sup>	Product development and basic technology development
The 3rd floor	6,939.11m <sup>2</sup>	Construction of products and production lines in production engineering divisions
The 2nd floor	4,084.06m <sup>2</sup>	Prototype evaluation
The 1st floor	6,241.55m <sup>2</sup>	Test line verification



Appearance of YTC



Open atrium



Meeting space where engineers interact



## Financial Capital

### Basic Approach to Strengthening Financial Capital

Yaskawa Group is working to maximize returns on invested capital by targeting a cost of equity of around 10%. ROE\*<sup>1</sup> and ROIC\*<sup>2</sup> are both management indicators in our financial and capital strategies.

Cash generated from operating activities is effectively used in three ways: (1) investment for growth, (2) return to shareholders, and (3) employee allocation, to achieve sustainable growth of corporate value.

As market expansion was delayed due to the spread of the COVID-19 infection, we revised our mid-term business plan with its final year FY2021 to "Challenge 25 Plus," extending the period by one year. In an environment of uncertainty over the future, we have reduced revenue target, but did not change the target for operating profit ratio. We will continue to improve profitability and aim to achieve "Vision 2025."

\*1 ROE: Return on Equity = Net income attributable to owners of the parent/Total equity attributable to owners of the parent

\*2 ROIC: Return on Invested Capital = Net income attributable to owners of the parent/Invested capital

#### ► Targets and Progress in Mid-Term Business Plan "Challenge 25 Plus"

	Achievements in FY2020	Targets for FY2022
<b>Promotion of capital-efficiency management</b>		
ROE	8.0%	15.0% or more
ROIC	7.0%	15.0% or more
<b>Cash allocation for sustainable enhancement of corporate value</b>		
Growth investment (including M & A)	22.7 billion yen	60 billion yen (FY2021 - FY2022 cumulative)
Payout ratio	33.1%	30.0%+α

### FY2020 Results and Challenges



Revenue decreased due to restrained capital investment in the manufacturing industry as a whole, affected by the worldwide spread of the COVID-19 mainly in the first half of the FY year. Operating profit, however, increased due to the acceleration of cost control measures that had been in place since before COVID crisis. Another reason is that we

strongly focused on cost reduction, reflecting on the fact that we were unable to thoroughly control expenses in FY2019 while revenue declined. In FY2021, we expect an increase in revenue as COVID crisis becomes more stable. To prevent expenses from increasing significantly, we will continue to control expenses by limiting the increase in expenses to 10% of the increase in revenue.



Our biggest challenge in the mid-term business plan is to increase added value. While cost control worked well throughout FY2020, we believe that we need to accelerate efforts to increase added value. Our core strategy is to expand our proposal-based business based on the “i3-Mechatronics” concept. Based on the YRM controller, an integrated controller that provides integrated control of Yaskawa motion products and robots, we will provide solutions

that enhance productivity in the manufacturing field. By doing so, we aim to increase the value of our component products by increasing our customers' profits through making their products and businesses win in the competition. In addition, we will launch new series of AC servo drive, expand lineup of new series of AC drive, and expand in-house production of robots in an effort to increase the added value of our products.

## Basic Approach to Balance Sheet Structure

### Current assets (cash on hand, etc.)

Yaskawa Group's basic policy is to maintain cash and time deposits at a level equivalent to one month of monthly turnover, while controlling the distribution of cash globally so that there is no surplus. In addition, in consideration of the current economic situation, we have secured a commitment line of 10 billion yen in preparation for an emergency.

### Non-current assets (Growth investment, M & A, etc.)

We will actively invest to contribute to future growth and productivity. During the “Challenge 25 Plus” period, we plan to allocate 6 - 7% of revenue to capital expenditures

and M & A activities. We project capital expenditures of approximately 60 billion yen over the next 2 years. The main purpose of M & A is to complement technologies to enhance value creation capabilities.

### Capital structure

By controlling the net D/E ratio\*3 to a certain level, we will ensure our financial safety. At the same time, we will utilize leverage to the extent that we can maintain our credit ratings, which will lead to maximizing returns and improving capital efficiency.

\*3 Net D/E ratio: (Interest-bearing debt – Cash and deposits)/Equity attributable to owners of parent

## Basic Approach to Cash Allocation

### Growth investment

To realize medium- to long-term growth in Yaskawa Group, we will invest 4 - 5% of revenue in R & D and continue to invest 6 - 7% in facilities and mergers and acquisitions. In FY2020, capital expenditures totaled 22.7 billion yen, mainly for YASKAWA Technology Center and YDX. The resulting depreciation and amortization expense was 16 billion yen, and we will make steady investments for growth in the uncertain market environment.

### Shareholder return

The target is a dividend payout ratio of 30% +  $\alpha$ . Even in the event of a decline in earnings, we will continue to return profits to shareholders as planned, based on stable dividends as long as we can secure cash. If earnings increase and cash is generated more than expected, we will consider additional return measures such as the acquisition of treasury stock.

### Employee distribution

We will also appropriately allocate resources to our employees, who are the most important in executing the business. In addition to executive compensation, bonuses for managers are also linked to performance. Bonuses to managers are calculated based on a standard operating profit ratio of 10%. No upper or lower limits are set for the return of profits. In calculating executive compensation and management bonuses, the Company takes into account the relative performance improvements compared with other companies as benchmarks, thereby increasing incentives to achieve higher profit growth than other companies. In FY2020, we introduced a policy not to set an upper limit on bonuses for general employees when operating profit ratio exceeds 10%. In this way, we are working to improve incentives by increasing the linkage between company-wide profit margins and bonuses.



## Manufactured Capital

### Basic Approach to Reinforcing Manufactured Capital

We will achieve more efficient production operations by developing and introducing a production system that is common throughout the entire company for each of the operations related to production that have been previously established for each division (plant.) In particular, for indirect work related to production (procurement and production planning,) this common production system will be applied not only to domestic plants but also to overseas plants, which will lead to a reduction in indirect man-hours for the entire Yaskawa Group. We also integrate our production engineering divisions, which handle production facilities at our plants, in order to raise the level of our production engineers. At the same time, we will directly reduce man-hours by installing more productive production facilities at plants in Japan and overseas.

We will also implement a drastic review of our production organization and operations to reduce production costs and achieve the goals set out in our long-term business plan "Vision 2025."

#### ► Targets and Progress of Mid-Term Business Plan "Challenge 25 Plus"

##### Introduction of leading-edge manufacturing

- Global production efficiency and optimization through expansion of the YASKAWA Solution Factory concept to plants in Japan and overseas -

	Achievements in FY2020	Targets for FY2022
<b>Improvement of productivity indicators</b> Improvement ratio for revenue per person for indirect and direct personnel at plants in Japan (compared to FY2019)	<b>+3 %</b>	<b>+17 %</b>
<b>Specific measures for achievement</b>		
<b>Global expansion of common production systems</b>	Completion of system introduction at plants in three businesses (completion at six main plants) <b>AC servo drive plant</b> (Iruma, Japan <sup>*1</sup> , Shenyang, China <sup>*1</sup> ) <b>AC drive plant</b> (Yukuhashi, Japan <sup>*1</sup> , Shanghai, China) <b>Robot plant</b> (Kitakyushu, Japan, Changzhou, China)	<b>Stabilize operation with the system and improve productivity</b>
<b>Deployment of next-generation production facilities<sup>*2</sup></b>	<b>Completed deployment to GA 500 production line in AC drive plant</b>	<b>Deployment to production lines of new products</b>

<sup>\*1</sup> Completed implementation in FY2019

<sup>\*2</sup> Production equipment that standardizes specifications based on the concept of "multi-function and simple" and continuously evolves based on acquired data to realize "non-stop" operation

### FY2020 Results and Challenges

#### Results

In FY2020, a common production system was introduced at 3 plants, and next-generation production equipment was installed at AC drive plant (GA 500 production line). The introduction of a common production

system has laid the groundwork for the sharing of business operations and unified the visualized format of data.

As a result of these initiatives, the productivity indicator, which serves as a materiality KPI, also improved compared to FY2019.

## Challenges

We have completed the introduction of a common production system at six major plants in Japan and overseas. In the future, in

order to make use of this system (data) to improve the efficiency and commonality of operations, it will be necessary to stabilize the use of the system in operation.

## Future Initiatives

In the past, individual production systems were used for indirect operations related to production, such as procurement and production planning. However, a new common production system was developed and introduced at six major plants in Japan and overseas. This enables us to standardize indirect operations related to production and visualize the global production status, parts procurement status, inventory status, etc. in real time, thereby achieving advanced and efficient production management on a global basis.

As for production technologies that directly contribute to the reduction of man-hours, we will integrate organizations that had been separated for each plant, and the engineers who developed the production facilities at AC servo drive plant will develop the facilities at AC drive plant. As a result, the more experienced and knowledgeable the engineers become, the higher their production technology will become, and it will become possible to construct

new facilities in a short period of time. At the same time, it is possible to apply the solution of the problem of the facility that was previously worked on to other products to be worked on from the beginning, and to install improved facilities.

In this way, we will accelerate the advancement of company-wide production technology and directly reduce man-hours by introducing excellent automation equipment at each plant. We will promote the sharing of production facilities on a global basis, and will be able to respond quickly and centrally to equipment troubles.

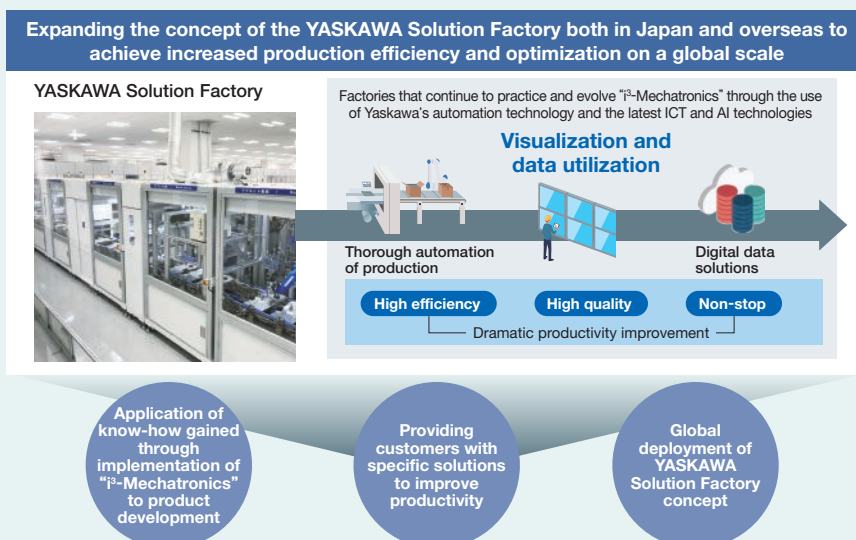
In addition, the lessons learned from the COVID-19 may further accelerate the automation of manufacturing processes in the future. Yaskawa, which manufactures business-to-business products, hopes to use the production facility concepts demonstrated in Yaskawa Group to help customers automate and streamline their manufacturing processes.



AC drive production line with next-generation production facilities



### ► Introduction of Leading-Edge Manufacturing





## Intellectual Capital

### Basic Approach to Reinforcing Intellectual Capital

Intellectual capital in the Yaskawa Group consists of technology and intellectual property, which are the sources of products and services.

In terms of technology, we will continue our efforts to develop the world's first and world's best products and technologies in order to create solutions that will solve our customers' management issues. At the same time, we will create customer value through a wide range of initiatives, including combining our products and technologies, strengthening our response to digital solutions and expanding collaboration with universities and other companies.

With regard to intellectual property, we will promote intellectual property strategies in cooperation with business plans and technology strategies, and support business development by preventing intellectual property disputes, appropriately protecting our own technologies, and responding to swift technical contracts according to business characteristics.

#### ► Targets and Progress of Mid-Term Business Plan "Challenge 25 Plus"

	Achievements in FY2020	Targets for FY2022
<b>Promotion of R &amp; D focused on the world's first and best technologies</b>		
<b>Industry-academia-government collaboration</b>	See "Examples of Industry-Academia-Government Collaboration" on page 38	Promoting collaboration with external parties for the world's first and world's best product and technology development
<b>Ratio of R &amp; D expenses to consolidated revenue</b>	<b>4.6 %</b>	<b>Maintain approximately 4.5 %</b>

### FY2020 Results and Challenges

#### Results

We optimized our development system in preparation for the opening of YASKAWA Technology Center, our new technology development base, in March 2021. We reviewed the development process based on the results of analysis of problems such as past delays in development, started operation, and verified its validity. In addition, preparations were made to improve development efficiency using ICT, including the establishment of mechanisms for sharing and visualizing development data, remote control and centralized management of environmental testing facilities, and the introduction of remote monitoring and automatic measurement systems for product evaluation. As for industry-academia-government collaboration activities, we set up research themes with partners for technology

collaboration in YASKAWA Technology Center and started activities.

#### Challenges

Our future challenge is to demonstrate the effectiveness of consolidating development resources and changing the way we work through development activities in YASKAWA Technology Center, and to ensure that this results in increased output from R & D.

We also believe it is necessary to invest more actively and effectively in R & D activities that will lead to the expansion of the Yaskawa Group's business, such as the early introduction of new products, the realization of ideas on the combination of proprietary technologies and products, the supplement of missing technologies, and collaboration with the third parties.

## Future Initiatives

### Establishment of YASKAWA Technology Center

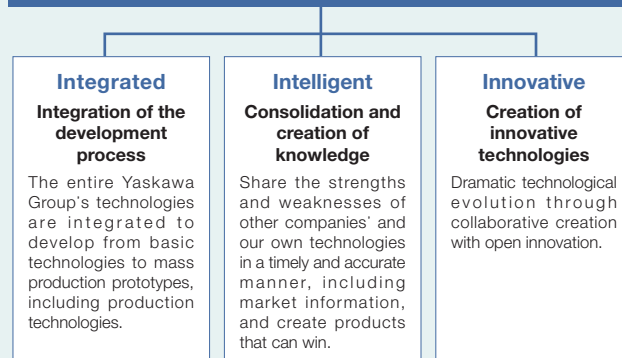
In order to build a system that can respond quickly to customer demands, we opened a new development base, YASKAWA Technology Center. The center's three keywords are "integration of development processes," "aggregation and creation of intelligence" and "creation of innovative technologies." The concept of the center is to become a technology-intensive base through which the Group's technologies and open innovation will enable the timely development of products that will lead to the success of customers' businesses.

In the development system, all business divisions and head office development divisions have been consolidated to create an environment in which all activities, from planning and development to production and quality control, can be carried out consistently. In addition, we will promote joint research that accelerates industry-academia-government collaboration, and aim for dramatic technological advancement by making the most of our internal and external strengths.

In the office, we have created an environment where we can share information and promote communication, and keep in touch with technological trends.

### YASKAWA Technology Center Concept

A technology-intensive base for the entire Yaskawa Group and open innovation to develop products that make customers win in a timely manner



### Examples of Industry-Academia-Government Collaboration

#### Established YASKAWA Joint Research Seminar on Future Technology with Tokyo Institute of Technology

In April 2020, we established the YASKAWA Joint Research Seminar on Future Technology with the Tokyo Institute of



Technology, and started joint research on ultra-light actuators for collaborative robot. With the goal of realizing an ultra-light collaborative robot 10 years from now, as a first step toward that goal, we are bringing together researchers in materials, motors, robotics, and other fields to study ultra-light actuators used as drive sources.

#### Comprehensive collaboration with Kyushu University

In June 2021, we reached an agreement with Kyushu University, a national university corporation, to comprehensively collaborate not



only in joint research but also in the creation of synergies in a wider range, in order to accelerate the relationship that has been set as a theme for each project, including the development of control technology for industrial robots. We aim to achieve sustainable growth through a wide range of activities, including the development of leading-edge technologies, collaboration in different fields, and human resource development.

### Topics

#### Derwent Top 100 Global Innovators for Six Consecutive Years

Yaskawa was selected as one of the Derwent Top 100 Global Innovators 2021 by Clarivate Analytics, a company headquartered in Philadelphia, USA. This will be the sixth consecutive year since 2015.

This award recognizes the 100 most innovative companies and organizations in the world based on the Clarivate Analytics' own analysis of intellectual property and patent trends.

Based in YASKAWA Technology Center, we will continue to develop the world's first and world's best products and technologies.

Top 100  
Global  
Innovator  
2021

Clarivate™



## Human Capital

### Basic Approach to Reinforcing Human Capital

The Yaskawa Group has established its Human Resources Philosophy, which sets forth the basic approach to human resources and personnel systems. It is our ideal that our employees have the will and continue to take on challenges with high motivation, and we are continuously working to improve our personnel system, work styles, and human resource development to achieve this goal.

Through these efforts, we aim to enhance the job satisfaction of each and every employee, lead to a virtuous cycle of employee growth toward their goals and improvement of Yaskawa Group's competitiveness, and continuously improve our corporate value.

#### ► Targets and Progress of Mid-Term Business Plan "Challenge 25 Plus"

	Achievements in FY2020	Targets for FY2022
<b>Reform personnel system with emphasis on employee job satisfaction</b>		
<b>Percentage of employees who feel rewarding to work (Group average)</b>	<b>80%</b> (72%)	<b>80% or More</b> (80% or More)
<b>Empower highly diverse human resources</b>		
<b>Female percentage of those applying for employment (Compared to the FY2018 level)</b>	<b>104%</b>	<b>Secure at least 125%</b>
<b>Percentage of female employees who are willing to become managers</b>	<b>21%</b>	<b>23% or more</b>
<b>Penetration among employees about promotion of human resource diversity* (Group average)</b>	<b>59%</b> (65%)	<b>70%</b> (70%)

\* Rate of positive responses to the question asking whether "a workplace culture that makes use of the strengths of diverse human resources is realized" in the ES questionnaire

### FY2020 Results and Challenges

#### Results

In FY2020, we reviewed the evaluation system with the aim of reforming our personnel system into one that gives employees a sense of satisfaction by clarifying the roles and duties of each employee and evaluating and treating their performance fairly. In addition, we strengthened human resource management by introducing a new FA\* system and assigning talented people with a desire to take on challenges to the right positions.

Furthermore, the ES Questionnaire (Employee Satisfaction Survey), which has been conducted on a non-consolidated basis every month since FY2016, was introduced to 12 major Group companies. As a result, it became possible to regularly quantify and visualize employee satisfaction and awareness, which are

indicators of human capital reinforcement, and to build a foundation for the Group to implement PDCA to achieve its vision.

\* A system designed to provide opportunities for employees to form their own careers

#### Challenges

We have been working to strengthen the promotion of women's participation in the workplace, but we recognize that the low ratio of women in managerial positions is an issue. Diversity and Inclusion is one of our materiality issues, and we set specific targets for the ratio of female managers and strengthen our initiatives. In addition, we will create an environment in which not only women but also a wide variety of human resources can play an active role, thereby enhancing job satisfaction and leading to a virtuous cycle of sustainable growth of all employees and improvement of the competitiveness of the company.

## Future Initiatives

Based on the recognition that "job satisfaction" is constantly changing in accordance with the circumstances surrounding individuals and the state of mind, we will set a target of at least 80% for the percentage of employees who feel job satisfaction, and implement various measures to maintain and improve the percentage. At Yaskawa, we start implementing measures that are expected to have great effects so that we will realize a diversity of human resources by enabling employees with diverse lifestyles to find their jobs rewarding.

With regard to the personnel system, we will continue to promote system reforms with the aim of improving the productivity of people and organizations through work style reforms and awareness reforms.

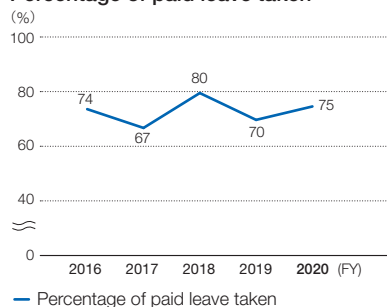
Regarding working styles, even before the impact of COVID-19, we have instituted a system of working at home for childcare and nursing care, and we have been preparing for the expansion of the system from the viewpoint of BCP. In April 2021, we introduced

the telework system in order to establish a variety of working styles that are not tied to time or location as the new normal. In order to make this type of work possible, we will develop an environment in which we can improve the productivity of the workplace and individuals regardless of whether they are in the office or not and create a system that allows managers to evaluate them.

As for human resource development, we believe it is important to measure the abilities of employees we hire and how they contribute to the creation of customer value, and to feed the results back into our training programs. In the future, in addition to the development of standard training programs, we will enhance training programs that are optimized for each individual.

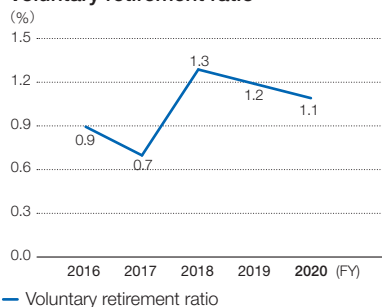
With the keywords of job satisfaction and lifestyle diversity, we will promote work style reforms that combine employee awareness and business reforms to maximize the abilities and customer value creation of each employee and improve Yaskawa Group's competitiveness.

**Percentage of paid leave taken**



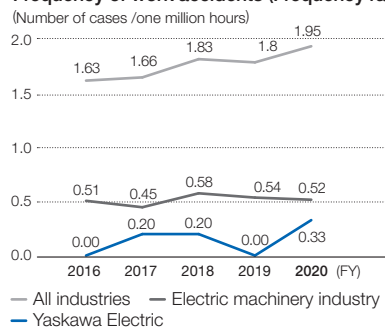
Aiming to transform our work style into more productive ways, we are encouraging employees to take annual paid leave in five consecutive days and providing individual follow-up to employees who have not taken enough days off.

**Voluntary retirement ratio**



The voluntary retirement ratio has been around 1% due to the improvements of work environments suited to various lifestyles.

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



By continuously improving our occupational health and safety management system, the frequency rate remains below the industry average.

## Human Resource Development and Employee Engagement at COVID crisis

Yaskawa's human resource development activities are based on the human resources philosophy of "Let us grow and nurture" and are designed to foster a corporate culture in which employees grow on their own. In addition, by raising the skill levels of individual employees, we are working to improve their job satisfaction, thereby enhancing organizational capabilities and improving productivity.

In COVID crisis, for human resource development through group training and other means, remote training is provided in response to the new normal by strengthening ICT. By doing so, many employees are able to take enhanced programs while reducing the risks associated with travel. Yaskawa also works to improve employee satisfaction by remotely implementing all of the curricula employees need.

In order to ensure that opportunities and quality for employee

development are not degraded, we utilize the characteristics of remote training to communicate between instructors and employees, divide employees into small groups, and ensure that employees can communicate with each other. In each remote training, we provide support to improve skills without degrading quality through employee training and communication.

In addition, as part of efforts to create an environment in which employees continue to learn, we actively utilize e-learning to provide an environment in which employees can learn whenever they want to. Through these and other initiatives, Yaskawa is promoting the provision of human resource development systems tailored to each employee's desire to learn and the environment. We will continue to promote initiatives that improve employee satisfaction, regardless of COVID.



## Social and Relationship Capital

### Basic Approach to Reinforcing Social and Relationship Capital

Yaskawa Group has inherited the founder's commitment to "serve the nation and society without pursuing temporary interests" and has contributed to the prosperity of the society by taking root in local communities. We have more than 100 years of history thanks to our relationships of trust with our stakeholders, including customers, business partners, and local communities.

As a global company, we will not only carry out business activities rooted in local communities, but also develop various symbiotic activities in line with local social issues. We will further deepen our dialogue and co-creation with stakeholders and strive to realize a sustainable society.

#### ► Targets and Progress of Mid-Term Business Plan "Challenge 25 Plus"

Achievements in FY2020		Targets for FY2022
Improving product safety and quality		
Centralization of quality information	Preparation of a system for centralizing market quality information in Japan and Asia completed	Start of global operation of centralized market quality information system
Building a sustainable supply chain		
Compliance with Sustainable Procurement Guidelines	Establishment of Sustainable Procurement Guidelines	Compliance rate of <b>50%</b> (Target: Major suppliers of Yaskawa Electric)
Coexistence with <i>glocal</i> communities		
Continued implementation of symbiosis activities at each local site	Continued implementation of symbiosis activities at each local site	Continued implementation of symbiosis activities at each local site
Support development of next-generation engineers by utilizing YASKAWA Innovation Center		
Number of visitors (Number of student visitors)	<b>4,032</b> (3,345) per year	Enhancement of new initiatives in the COVID situation (Remote plant tours)

### FY2020 Results, Challenges and Future Initiatives

#### Ensuring customers use products with security

##### Results

To ensure that our customers can use Yaskawa products with security, we have established a global quality assurance system and are working to improve the safety and quality of our products, including our services. In FY2020, preparations were completed for the unification of market quality information for Japan and Asia, and lifecycle support for customer facilities began through integrated sales and service operations.

##### Challenges and Future Initiatives

In FY2021, in order to build a system for improving quality, we integrated the service functions previously under the Sales Division with the market quality promotion functions. In this way, we will further strengthen the swift collection and response of market quality information on a global scale that we have been promoting, and aim to achieve product and service quality that does not stop at customers' facilities and lines, as well as to achieve predictive and preventive maintenance based on data.

## Strengthen initiatives in the supply chain

### Results

In order to build a sustainable supply chain, we have been working closely with our suppliers on a daily basis to strengthen our relationships with them. In addition to our existing procurement policies and green procurement guidelines, we have also established new Sustainable Procurement Guidelines\*.

\* Sustainable procurement guidelines:  
<https://www.yaskawa-global.com/company/csr/scm/procurement>

### Challenges and Future Initiatives

In building a sustainable supply chain, we will further strengthen cooperation with overseas companies to achieve a 100% compliance rate with the Sustainable Procurement Guidelines by FY2025, and will steadily address social issues in procurement activities as a group. In FY2021, based on the Sustainable Procurement Guidelines, we plan to disseminate information at explanatory meetings and during visits, and ask major suppliers in Japan to submit a self-review sheet.

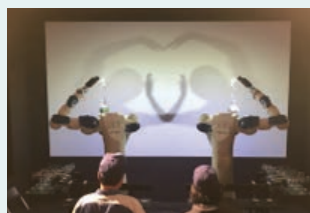
## Contribution to local communities

### Results

In FY2020, due to the impact of the spread of the COVID-19, face-to-face activities were not realized, but we continued to provide support for the promotion of culture, art, and sports.

Specifically, in addition to being the main sponsor of soccer team Gillavanz Kitakyushu, Yaskawa provided industrial robots and carried out technical cooperation as part of the ART for SDGs exhibition at the Kitakyushu Future Creation Art Festival. We also started an online factory tour. We also sell products made by people with disabilities (such as sweets and eco bags) at our in-house kiosks, and promote social contribution activities to coexist and co-create with the local community.

In addition, in the event of heavy rain in July 2020, we made a donation to the Central Community Chest of Japan to help with the recovery and reconstruction of the disaster area. Donations were also made



Collaborating with ART for SDGs: Art to enjoy the changing shadows of robot arms with lighting fixtures and objects

to nearby schools to cover the cost of measures against the COVID-19.

### Challenges and Future Initiatives

In order to accelerate activities that are more characteristic of Yaskawa than ever before, we have formulated a Social Contribution Policy. Based on this policy, Yaskawa will enhance the programs it conducts, focusing on the following two directions: (1) development of human resources who will lead the evolution of manufacturing, and (2) coexistence and co-creation with local communities.

In addition, by shifting the timing of the event to a long vacation period, preparations will be made so that events can be held either by real or remote means, and activities will be enhanced with a view of COVID crisis and after.

In COVID crisis as well, we will continue to provide as much support as possible and contribute to the revitalization of local communities, without changing the guidelines of our activities.

## Strengthening shareholder and investor relations

### Results

A hybrid virtual General Meeting of Shareholders (participatory-type) was held for two consecutive years to build a system that allows shareholders to participate broadly, regardless of the declaration of a state of emergency or the location of residence. We also worked to enhance information disclosure by releasing videos of our business reports shown at the General Meeting of Shareholders on our official website and holding virtual business briefings for institutional investors and analysts.

### Challenges and Future Initiatives

The Company will continue to promptly disclose and send convocation notices, enhance the content of the notice so that shareholders can make more appropriate decisions, and consider expanding the scope of the notice to be translated into English. In addition, we will improve the content of our IR portal site and YASKAWA report, and maximize opportunities for communication with shareholders and investors through the use of remote tools.



## Natural Capital

### Basic Approach to Reinforcing Natural Capital

Yaskawa Group's environmental management is guided by two pillars: the Green Process, which aims to reduce the environmental impact of Yaskawa's operations, and the Green Products<sup>\*1</sup>, which aims to contribute to reducing the environmental impact of customers around the world through Yaskawa products. In particular, we recognize that addressing climate change is an urgent global issue, and we will promote environmental management with the aim of achieving a reduction in CO<sub>2</sub> emissions by Yaskawa products by 100 times or more that by Yaskawa Group in 2025 (CCE 100<sup>\*2</sup>), which will lead to sustainable enhancement of corporate value.

<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.

<sup>\*2</sup> Contribution to Cool Earth 100. A target of reducing CO<sub>2</sub> emissions through Yaskawa products by 100 times or more of the CO<sub>2</sub> emissions of the Group by FY2025

### ► Targets and Progress of Mid-Term Business Plan "Challenge 25 Plus"

	Achievements in FY2020	Targets for FY2022
<b>Improve energy consumption by spreading the use of Yaskawa products (Green Products)</b>		
<b>Contribution to reducing CO<sub>2</sub> emissions through products (Cumulative since FY2016)</b>	<b>35.46 million t-CO<sub>2</sub></b>	<b>73 million t-CO<sub>2</sub> or more</b>
<b>Reduce effects on the environment throughout the Yaskawa Group (Green Process)</b>		
<b>CO<sub>2</sub> emission reduction rate (Compared to FY2018) (Yaskawa Group)</b>	<b>10%</b>	<b>10% or more</b> * including increased emissions due to the start of operations at new plants
<b>Renewable energy ratio of electric power (Yaskawa Electric Non-consolidated)</b>	<b>43%</b>	<b>58% or more</b>

### FY2020 Results and Challenges

#### Results

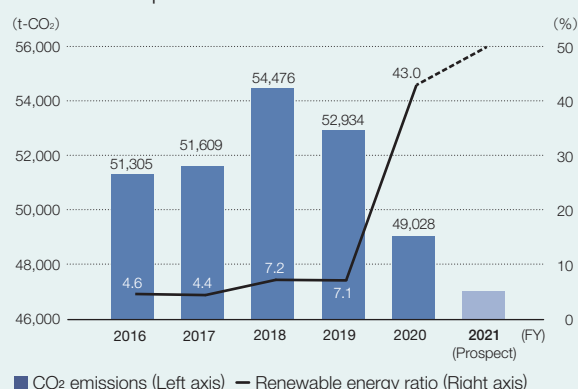
To improve the ratio of renewable energy to electricity, we have been installing solar power generation facilities, and in FY2020, we installed 515kW in our Nakama plant and 295kW in YASKAWA Technology Center. In addition, since FY2019, we have been substantially introducing renewable energy-derived electricity from electric power companies at the Yahatanishi plant and the Nakama robot plant, and in



The Enewell-SOL P2 (left), PV inverter manufactured by Yaskawa and 295kW solar power generation system (right) installed on YASKAWA Technology Center which opened in FY2021

FY2020 at the Kokura plant and the Nakama systems plant.

As a result of these efforts, the ratio of renewable energy to total electricity at Yaskawa Electric alone was about 43% as of FY2020, greatly contributing to the reduction of CO<sub>2</sub> emissions in Yaskawa Group.





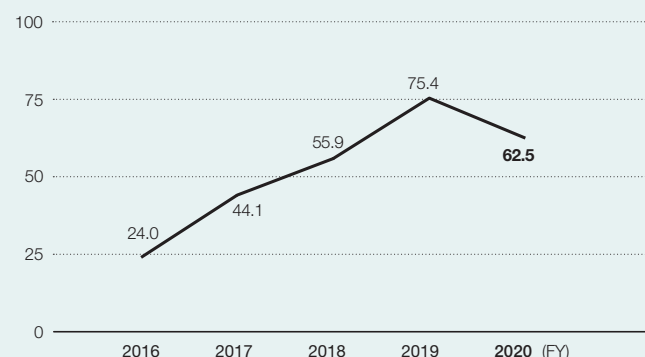
Yaskawa Group's efforts to reduce CO<sub>2</sub> emissions were successful due to the significant introduction of renewable energy-derived electricity. However, due to the impact of the US-China trade friction and the COVID-19, the reduction of CO<sub>2</sub> emissions by Yaskawa products decreased due to revenue decline of Green Products, and CCE 100 worsened to approximately 63 times.

FY	2016	2017	2018	2019	2020
Yaskawa products' contribution to CO <sub>2</sub> emissions reduction	1,233	2,275	3,046	3,993	3,067
CO <sub>2</sub> emissions by Yaskawa Group	51	52	54	53	49

(1000 t-CO<sub>2</sub>)

### Trends in CCE 100 (Yaskawa products' contribution to CO<sub>2</sub> emissions reduction/Yaskawa Group's CO<sub>2</sub> Emissions)

(Times)



## Initiatives for Carbon Neutrality

To help curb global warming, Yaskawa Group set a new target of achieving net zero CO<sub>2</sub> emissions (carbon neutral) in 2050 as a result of its global business activities, and set a 36% reduction in CO<sub>2</sub> emissions (compared to FY2018 levels) in FY2030 under the 2050 CARBON NEUTRAL CHALLENGE scheme. As part of our decarbonization efforts, we have installed solar power generation panels using our own PV inverter at each of our plants, and our total

generation capacity has reached approximately 2.5 MW. In addition, we promoted the introduction of 100% renewable energy-derived electricity at the Yahatanishi, Nakama, and Kokura facilities. We will continue to expand this initiative to all of our bases in Japan and overseas in order to achieve this goal and contribute to the realization of a sustainable society.

## Future Initiatives

Aiming to become carbon neutral in 2050, we will promote environmental management throughout the entire Group and accelerate the reduction of the environmental impact of production activities throughout the Group by collaborating globally with factories in Japan, Europe, North America and China.

In addition to thoroughly reducing energy consumption through measures such as switching to LEDs for lighting, upgrading air conditioning equipment, and improving the efficiency of production facilities, we will promote decarbonization throughout the Group, including the installation of solar panels at plants and offices, including overseas Group companies, and the introduction of renewable energy-derived electricity.

In addition, we will increase the proportion of Green Products in revenue, comply with the European RoHS Directive and REACH regulations, and ensure the management of chemical substances contained in our products, thereby increasing the environmental contribution of our products and accelerating efforts to reduce their environmental impact.

Furthermore, based on the results of information disclosure based on the TCFD recommendations implemented in May 2021, we will continue to respond to the identified risks and opportunities, and will further promote information disclosure based on comments from stakeholders.

Message from Outside Director

# Strengthening Both Defensive and Offensive Governance

Outside Director,  
Audit and Supervisory Committee Member

**Toshikazu Koike**



### Appointment as Outside Director

This time, I will assume a heavy responsibility as an Outside Director and Audit and Supervisory Committee Member, and I feel motivated.

During my 23 years in the United States, I had a variety of experiences in sales, product planning, marketing, IT, logistics, customer service and finance. Since I became president of the Americas Regional Headquarters 21 years ago, I have been in charge of the management of the global group to this day. I would like to contribute to the sustainable growth of the Yaskawa Group and its eternal prosperity, based on the experience and knowledge I have accumulated, including many failures.

### Expectations for management

The appeal of the Yaskawa Group is that it has a portfolio of businesses that are expected to grow, such as the environment and social infrastructure businesses, in addition to its core businesses such as motion control and robots. In addition, Yaskawa is actively engaged in new businesses such as biotechnology, and I feel that this has led to high evaluations from stakeholders. And by combining these businesses with value-added solutions to make them even stronger, I think we have a chance to make a big leap.

### The Yaskawa Group's corporate governance in the future

As an outside director, I have an image of Yaskawa as an open corporate culture. From now on, in addition to the defensive governance that further enhances transparency and ethics, I believe it is necessary to foster a spirit of boldly taking on the challenge of business and strengthen both proactive governance that is rich in diversity.

## Key Initiatives in FY2020 and KPIs in Mid-Term Business Plan “Challenge 25 Plus”

Achievements in FY2020	KPI for a Fair and Transparent Governance System (FY2022)
<p>Awareness of the reporting system for legal violations</p> <p><b>27% improvement from FY2018</b></p> <p>(Results of FY2020 employee questionnaire)</p>	<p>Awareness of the reporting system for legal violations</p> <p><b>Improvement by at least 20% from FY2018 level</b></p> <p>(Awareness is measured by employee questionnaire)</p>
<p>Level of implementation of information security measures</p> <p><b>20% improvement from FY2019</b></p> <p>(Implemented audit assessment by external audit organization/ Planned zero-trust security measures through the formulation of a roadmap)</p>	<p>Level evaluation score for information security measures</p> <p><b>Improvement by 10% or more annually from FY2018</b></p> <p>(Measurement of evaluation points for each IPA-compliant security index)</p>
<p>Implementation of disaster prevention risk surveys at major plants</p>	<p>Improvement plan execution rate in disaster prevention risk survey</p> <p><b>100%</b></p>
<p>Implementation of self-evaluation of the Board of Directors</p> <p><b>In addition to annual self-evaluations, third-party evaluations are conducted every three years</b></p>	<p>Implementation of self-evaluation of the Board of Directors</p> <p><b>In addition to annual self-evaluations, third-party evaluations are conducted every three years</b></p>

### Major Initiatives in FY2020

#### Awareness of the reporting system for legal violations

The Compliance Promotion Month was set up to raise awareness of the reporting system through the dissemination of messages from the top management and the activities of the legal experts, who are in charge of legal affairs and are well versed in business operations and applicable laws and regulations, as well as the activities of the compliance promotion leader established in each business division. We will continue to strive to maintain and improve awareness of the reporting system through information dissemination and activities to prevent violations of laws and regulations.

#### Improvement of level evaluation score for information security measures

Since FY2020, Yaskawa has been engaged in digital management utilizing IT under the slogan of YASKAWA Digital Transformation (YDX). New threats and security risks are increasing in addition to conventional cyber attacks, such as cloud services and the increase of remote work in COVID crisis, which are essential for achieving these goals.

For this reason, we regard the response to information security risks as a management issue and consider these measures to be necessary investments for future business activities and growth. In FY2020, we conducted an information security audit by an external organization, established a new evaluation standard covering various guidelines and regulations, strengthened the system,

formulated a roadmap, implemented PDCA and necessary security measures, and conducted numerical evaluations. Going forward, we will define zero trust security\* as three access layers: cloud, network, and endpoint, and move forward with the transition to a zero trust environment utilizing cloud resources, with the aim of further strengthening security. We will also confirm changes in the environment and technological progress based on the circumstances of other companies and strive to maintain and improve the security level.

\* Zero-trust security: The concept of security measures based on the assumption that “everything is untrustworthy”

#### Implementation of disaster prevention risk surveys at major plants

A disaster risk survey was conducted at four business sites in Japan (Yahatanishi, Yahatahigashi, Yukuhashi, Nakama,) and fire, water, and earthquake risks were evaluated. Improvement plans were prepared for improvement proposals extracted as a result of the evaluation.

#### Continued implementation of the Board of Directors evaluation

We conducted a survey of all directors. In addition, independent hearings with directors are conducted by a third-party organization once every 3 years, and are scheduled to be held in FY2021.

For details, please refer to “Evaluation of the Effectiveness of the Board of Directors” on page 48.

## Basic Approach to Corporate Governance

Yaskawa has established Yaskawa Electric Corporate Governance Policy, which outlines its basic stance on

corporate governance, with the aim of enhancing corporate value for our stakeholders over the medium- to long-term.

### Yaskawa Electric Corporate Governance Policy

#### Chapter 1 Ensuring Shareholder Rights and Equality

1. Policy for the General Meeting of Shareholders
2. Capital Policy
3. Policy on Cross-Shareholdings
4. Policy on Takeover Defense Measures
5. Policy for Transactions between Relevant Parties

#### Chapter 2 Appropriate Collaboration with Stakeholders Except Shareholders

1. Basic Concept for Strengthening Social and Relationship Capital
2. Social and Environmental Issues

#### Chapter 3 Ensuring Appropriate Information Disclosure and Transparency

#### Chapter 4 Responsibilities of the Board of Directors, etc.

1. Organization Design
2. Board of Directors Policy
3. Policy on Directors
4. Independent Outside Director
5. Access to Independent Experts
6. Advisory Committee
7. Exchange of information and sharing of awareness among independent outside directors
8. Directors' Remuneration
9. Roles of the Audit and Supervisory Committee

#### Chapter 5 Communication with Shareholders

#### Chapter 6 Other

\*For details of this policy, please see the website. [https://www.yaskawa-global.com/wp-content/uploads/2021/02/Corporate\\_Governance\\_Policy.pdf](https://www.yaskawa-global.com/wp-content/uploads/2021/02/Corporate_Governance_Policy.pdf)

## Corporate Governance System

As a Business-to-Business manufacturing company, Yaskawa's management requires in-depth knowledge of market characteristics and technological trends, it has selected a system with an Audit and Supervisory Committee as an institutional design for its organization on the assumption that the president has authority over management policies, nominations, and compensation.

Furthermore, we have developed a governance system to enhance the effectiveness of the Board of Directors by actively incorporating external knowledge, and to strengthen both defensive and offensive governance, in order to continuously improve corporate value. Yaskawa will continue to pursue its best, enhance management transparency, and further enhance corporate governance.

### History of Initiatives to Enhance Corporate Governance

FY		FY2012 – FY2014	FY2015 – FY2017	FY2018 – FY2020
Main measures		<b>FY2012</b> <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> <b>FY2014</b> <ul style="list-style-type: none"> <li>Voluntary Remuneration Advisory Committee established</li> </ul>	<b>FY2015</b> <ul style="list-style-type: none"> <li>Transition to a company with Audit and Supervisory Committee</li> <li>Voluntary Nomination Advisory Committee established</li> </ul> <b>FY2016</b> <ul style="list-style-type: none"> <li>Evaluation of the effectiveness of the Board of Directors commenced</li> </ul>	<b>FY2018</b> <ul style="list-style-type: none"> <li>At least 1/3 of the board of directors are independent outside directors</li> </ul> <b>FY2019</b> <ul style="list-style-type: none"> <li>Disclosed board skill matrix (In addition to the fields expected of each director, gender and age are listed)</li> </ul> <b>FY2020</b> <ul style="list-style-type: none"> <li>Determination of basic policies for executive compensation</li> <li>Established Yaskawa Electric Corporate Governance Policy</li> <li>Established Sustainability Policy (March 2021)</li> </ul>
Aim and purpose		<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> </ul>
Institution establishment		Company with Board of Corporate Auditors	Company with Audit and Supervisory Committee	
Composition of the Board of Directors	Internal	6	8*	8*
	Independent outside (Female)	1	3*	4* (1)
Composition of Audit and Supervisory Committee (Up to FY2014, data indicated as "Board of Corporate Auditors")	Internal	2	2	2
	Independent outside (Female)	2	3	4 (1)

\* Including directors who are Audit and Supervisory Committee members.

## Composition of the Board of Directors

Yaskawa's Board of Directors is composed of individuals with advanced knowledge and experience in various areas of corporate management. In addition, areas of particular importance in corporate management are defined as "corporate management and management strategy," "corporate governance," "finance and accounting," "legal affairs," "sales and marketing," "manufacturing, R & D and ICT," and "global."

Since May 2018, we have increased the number of independent outside directors to more than 1/3 of the Board of Directors. In addition, the number of directors is not unevenly distributed in important areas of management where each director is expected to demonstrate his or her abilities.

\* 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/2021/04/105\\_agm\\_en.pdf](https://www.yaskawa-global.com/wp-content/uploads/2021/04/105_agm_en.pdf)

### Structures for the Board of Directors, the Audit and Supervisory Committee, and Advisory Committees

Name (Age)	Attributes	Structure				Field of capability that Yaskawa expect each director to demonstrate								● Male ○ Female
		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		
Junji Tsuda (70)		◎				●	●			●		●	●	
Hiroshi Ogasawara (65)		○		◎		●	●	●		●	●	●	●	
Shuji Murakami (62)		○			○	●	●	●	●			●	●	
Yoshikatsu Minami (61)		○				●	●				●	●	●	
Masahiro Ogawa (56)		○				●	●			●	●	●	●	
Yasuhiko Morikawa (58)		○				●	●	●	●			●	●	
Yuichiro Kato (51)	Independent	○		○	○	●	●			●	●	●	●	
Yuji Nakayama (61)		○	◎			●	●	●				●	●	
Koichi Tsukahata (60)		○	○			●	●					●	●	
Yoshiki Akita (69)	Independent	○	○	○	○	●	●	●	●			●	●	
Junko Sasaki (61)	Independent	○	○	○	○	●	●			●	●	●	○	
Hideo Tsukamoto (40)	Independent	○	○	○	○	●	●		●			●	●	
Toshikazu Koike (65)	Independent	○	○	○	◎	●	●			●		●	●	

◎ Chairperson ○ Member

Note: The above table does not represent the full knowledge of each director. Age is as of the 105th general meeting of shareholders held on May 26, 2021.

## Evaluation of the Effectiveness of the Board of Directors

Yaskawa has been conducting an evaluation of the effectiveness of the Board of Directors every year since FY2016 to ensure the sustainable enhancement of corporate value through the improvement of the effectiveness of the Board of Directors. All Directors, including Audit and Supervisory Committee Members, respond to the "Questionnaire on the Evaluation of the Board of Directors" (anonymous method) after understanding the purpose of the evaluation.

According to the FY2020 survey, respondents answered to more than 80% of the evaluation items as "done," indicating that the Board of Directors is generally effective. On the other hand, the response "urgent improvement is necessary" was also extracted, which was not extracted in the past two years. We believe this is an increase in the level required of the Board of Directors. We are working to further improve the effectiveness of these measures by taking them into account.

## Executive Compensation

### Basic policy on executive compensation

The Board of Directors of Yaskawa determines the compensation policy for Directors (excluding Audit and Supervisory Committee Members.)

As a basic policy, for the purpose of continuous enhancement of corporate value and enhancement of competitiveness, the remuneration level of Yaskawa's officers shall be such that excellent human resources can be secured, and the incentive for short-term, medium- to long-term performance improvement shall function.

The basic policy for performance-linked compensation is as follows.

#### • Single-year compensation

In order to raise awareness of continuous profit improvement for the entire company, compensation will be provided according to profit performance in the previous fiscal year.

#### • Medium- to long-term compensation

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

## Compensation Advisory Committee

### Remuneration to Directors

#### (Excluding Audit and Supervisory Committee Members)

##### ① Basic compensation

The maximum amount of basic remuneration for Directors shall be a fixed limit of 430 million yen or less.

##### • Directors (excluding Outside Directors)

A certain amount will be provided according to the performance evaluation and position of each director as he/she is responsible for improving corporate value.

##### • Outside Director

A fixed amount will be provided in advance for the responsibility of supervising the execution of duties.

##### ② Performance-linked compensation (single-year compensation)

##### • Directors (excluding Outside Directors)

The maximum amount of performance-linked compensation shall be 1.0% or less of the consolidated net

income of the fiscal year prior to the General Meeting of Shareholders appointed or reappointed, in order to more clearly link compensation to consolidated performance. The amount of remuneration for each director is calculated by taking into account the relative results of Yaskawa from standard deviations with respect to operating profit, operating profit growth rates and ROA performance of other companies in the same industry.

##### • Outside Director

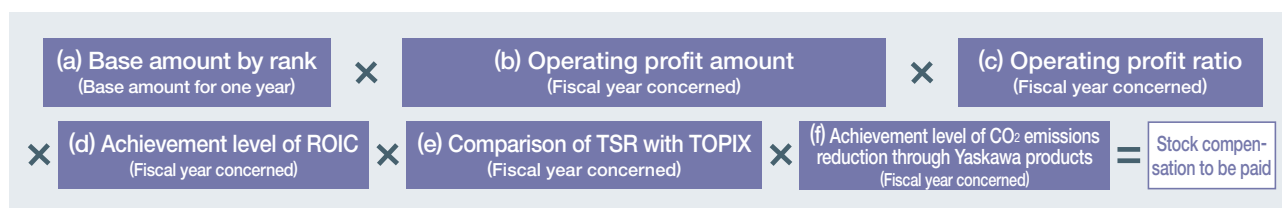
Performance-linked compensation is not provided.

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

##### • Directors (excluding Outside Directors)

The evaluation indices used to calculate stock-based compensation in mid-term business plan "Challenge 25 Plus" from FY2021 to FY2022 are as follows. The stock compensation is calculated by multiplying the performance factor according to the target value of each evaluation index.

#### ► Evaluation Indicators and Formulas for Stock Compensation for Directors (Excluding Outside Directors)



#### ► Target

	Target value		Achievement factor
	FY2021	FY2022	
(a) Base amount by rank (Base amount for one year)			
(b) Operating profit amount (Fiscal year concerned)	42.0 billion yen or more	61.0 billion yen or more	$(0.84/347 \times \text{Operating profit amount}) - a^1$
	Less than 42.0 billion yen	Less than 61.0 billion yen	$0.64/b \times \text{Operating profit amount}^{*2}$
	Less than the results of the previous fiscal year (27.1 billion yen)	Calculated based on the results of the previous fiscal year (2021)	0
(c) Operating profit ratio (Fiscal year concerned)	9.8%	13.0%	0.80~1.20
(d) Achievement level of ROIC (Fiscal year concerned)	11.3%	15.0%	0.80~1.0
(e) Comparison of TSR with TOPIX (Fiscal year concerned)	No settings		TSR/TOPIX growth rate for the fiscal year concerned
(f) Achievement level of CO <sub>2</sub> emissions reduction through Yaskawa products (Fiscal year concerned)	40 million tons	73 million tons	0.80~1.20

\*1 a: Substitute the numbers on the right FY2021: 0.017 FY2022: 0.477

\*2 b: Substitute the numbers on the right FY2021: 42.0 FY2022: 61.0

##### (a) Base amount by rank

In light of the size and responsibilities of the areas in which Directors are responsible and their contribution to Group management, the Company sets the base amount according to their positions after deliberation by the Compensation Advisory Committee.

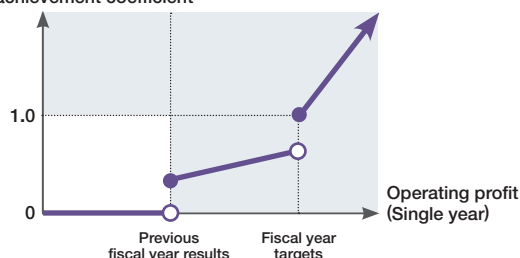
##### (b) Operating profit amount (fiscal year concerned)

Evaluations are based on operating profit values for each fiscal year of the mid-term business plan "Challenge 25 Plus" from FY2020 to FY2021. From the time of exceeding the results of the previous fiscal year, evaluation is conducted by a certain coefficient, and the coefficient is set higher after

achievement of the target originally planned for the fiscal year. By doing so, we aim to increase the motivation of directors to achieve the plan and to maintain their willingness to take active measures after achieving the plan.

### Evaluation image

Target achievement coefficient



### (c) Operating profit ratio (fiscal year concerned)

The evaluation is based on the degree of achievement of operating profit ratio for the purpose of securing high competitiveness and growing into a highly profitable company.

### (d) Achievement level of ROIC (fiscal year concerned)

To motivate Directors to improve capital efficiency and profitability, we evaluate directors according to their degree of achievement of ROIC.

### (e) Comparison of TSR (total shareholders return) with TOPIX (fiscal year concerned)

Evaluations are conducted according to the degree of achievement of TSR with the aim of motivating directors to increase corporate value from the shareholders' point of view.

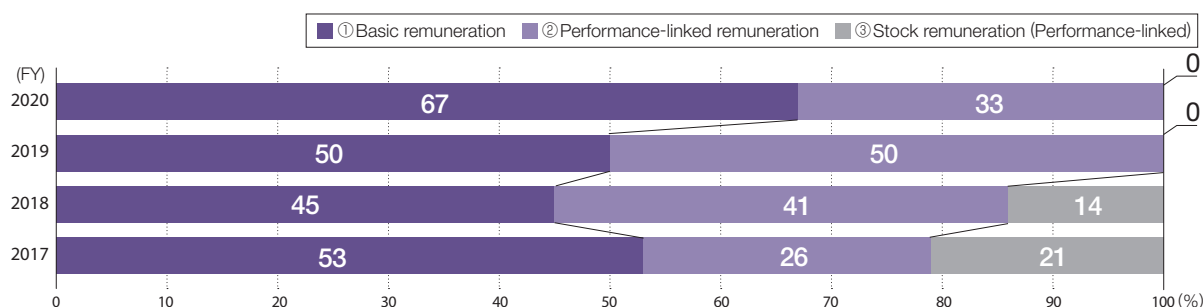
### (f) Achievement level of CO<sub>2</sub> emissions reduction through Yaskawa products (fiscal year concerned)

In order to realize sustainable corporate activities and respond to social issues, Yaskawa evaluates the achievement of CO<sub>2</sub> emission reduction targets through its products.

### ► Evaluation Indicators for Stock Compensation for Outside Directors

It is based on the indicator and amount of Directors who are Audit and Supervisory Committee members. (non-performance-linked)

### ► Composition of compensation for Directors (Excluding Audit and Supervisory Committee Members)



### 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) shall be designed without upper limit so that any improvement in performance is returned as compensation. Therefore, if the performance of the indicators used as the basis for calculation is favorable, the ratio of basic remuneration will be relatively small, whereas if the performance of the indicators used as the basis for calculation is unfavorable, the ratio of basic remuneration will be relatively large.

#### • Outside Director

From the perspective of independence, performance-linked compensation is not provided, and basic compensation and non-performance-linked stock compensation only when performance targets are achieved are provided. The composition of compensation for Outside Directors is 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 Audit and Supervisory Committee members shall be a fixed limit of 150 million yen or less.


#### ② Stock compensation

In light of the situation in which the Audit and Supervisory Committee members, in addition to the function of supervising business execution, are responsible for monitoring management execution, etc. to ensure the achievement of mid-term business plan, remuneration will be paid on the premise of mid-term business plan's achievement. In order to share value with shareholders, this remuneration is a stock-based remuneration. The number of shares to be paid to Audit and Supervisory Committee members is not linked to business performance, and the value of the remuneration is linked only to Yaskawa Stock Price, thereby eliminating the impact on the Audit and Supervisory Committee members' function of supervising business execution.

# Members of the Board of Directors

<p><b>Junji Tsuda</b> (March 15, 1951) <b>Representative Director, Chairman of the Board</b> Number of shares of the Company held: 608 hundred</p>		<p>Mar. 1976 Joined the Company Jun. 2005 Director, General Manager, Drives Div., Motion Control Div. Jun. 2009 Managing Director, General Manager, Robotics Div. Mar. 2010 President (Representative Director) Mar. 2013 Representative Director, Chairman of the Board, President Mar. 2016 Representative Director, Chairman of the Board (incumbent)</p>	<p>Apr. 2017 Chairman, board of directors, the University of Kitakyushu (incumbent) Jun. 2018 Outside Director, TOTO LTD. (incumbent)  <b>[Significant concurrent positions]</b> Chairman, board of directors, the University of Kitakyushu Outside Director, TOTO LTD.</p>
<p><b>Hiroshi Ogasawara</b> (September 19, 1955) <b>Representative Director, President</b> Number of shares of the Company held: 450 hundred</p>		<p>Mar. 1979 Joined the Company Jun. 2006 Director Mar. 2007 Director, General Manager, Drives Div. Mar. 2011 Director, General Manager, Motion Control Div. Jun. 2012 Corporate Vice President, General Manager, Motion Control Div. Jun. 2013 Director, Managing Executive Officer Mar. 2014 Director, Managing Executive Officer, General Manager, Technology &amp; Development Div. Mar. 2015 Representative Director, Senior Managing Executive Officer, General Manager, Technology &amp; Development Div.</p>	<p>Mar. 2016 Representative Director, President, General Manager, Technology &amp; Development Div. Mar. 2017 Representative Director, President, In charge of Human Resources Development, Manager, Diversity Management Div. Mar. 2018 Representative Director, President, In charge of Human Resources Development, Manager, ICT Strategy Div. Jul. 2020 Representative Director, President, In charge of Human Resources Development, Regional Manager, China, Manager, ICT Strategy Div. (incumbent)</p>
<p><b>Shuji Murakami</b> (April 21, 1959) <b>Representative Director, Senior Managing Executive Officer</b> Number of shares of the Company held: 413 hundred</p>		<p>Mar. 1982 Joined the Company Jun. 2008 Director, Manager, Corporate Planning Div. Jun. 2012 Director, Corporate Vice President Mar. 2014 Director, Managing Executive Officer Mar. 2016 Representative Director, Senior Managing Executive Officer Mar. 2017 Representative Director, Senior Managing Executive Officer, In charge of CSR &amp; Compliance, In charge of Administration, General Manager, Corporate Planning Div.</p>	<p>Mar. 2020 Representative Director, Senior Managing Executive Officer, In charge of CSR, In charge of Administration, General Manager, Corporate Planning Div. (incumbent)</p>
<p><b>Yoshikatsu Minami</b> (October 31, 1959) <b>Director, Managing Executive Officer</b> Number of shares of the Company held: 317 hundred</p>		<p>Dec. 1983 Joined the Company Jun. 2008 Director Jun. 2012 Corporate Vice President, General Manager, Robotics Div. Jun. 2015 Director, Managing Executive Officer Mar. 2017 Director, Managing Executive Officer, In charge of ICT strategy, General Manager, Production Management &amp; Operations Div., General Manager, Export Administration Div. Mar. 2018 Director, Managing Executive Officer, General Manager, Production Management &amp; Operations</p>	<p>Mar. 2020 Div., General Manager, Export Administration Div. Director, Managing Executive Officer, General Manager, Production Management &amp; Operations Div., General Manager, Export &amp; Import Administration Div. (incumbent)</p>
<p><b>Masahiro Ogawa</b> (August 25, 1964) <b>Director, Managing Executive Officer</b> Number of shares of the Company held: 174 hundred</p>		<p>Mar. 1987 Joined the Company Dec. 2010 Chairman, YASKAWA AMERICA, Inc. Jun. 2012 Corporate Vice President Mar. 2016 Corporate Vice President, General Manager, Robotics Div., Chairman of the Board of Directors, YASKAWA SHOUGANG ROBOT CO., LTD. (incumbent) Mar. 2019 Corporate Vice President, General Manager, Robotics Div., General Manager, Control Technology Div., Robotics Div. May. 2019 Director</p>	<p>Mar. 2020 Director, Managing Executive Officer, General Manager, Robotics Div., General Manager, Control Technology Div., Robotics Div. Mar. 2021 Director, Managing Executive Officer, General Manager, Robotics Div. (incumbent)  <b>[Significant concurrent position]</b> Chairman, YASKAWA SHOUGANG ROBOT CO., LTD.</p>
<p><b>Yasuhiko Morikawa</b> (June 11, 1962) <b>Director, Senior Executive Officer</b> Number of shares of the Company held: 104 hundred</p>		<p>Apr. 1985 Joined The Dai-ichi Kangyo Bank, Limited (currently Mizuho Bank, Ltd.) Apr. 2008 Corporate Officer, Corporate Planning Group, Mizuho Corporate Bank, Ltd. (currently Mizuho Bank, Ltd.) Apr. 2010 General Manager, Gotanda Branch, Mizuho Bank, Ltd. Apr. 2012 General Manager, Financial Institutions Banking Division No. 1, Mizuho Corporate Bank, Ltd. (currently Mizuho Bank, Ltd.) Apr. 2013 Executive Officer, Mizuho Corporate Bank, Ltd. May. 2015 Joined the Company, Trustee Mar. 2016 Corporate Vice President, General Manager, Tokyo Office, Corporate Marketing Div., In charge of Corporate Marketing, Corporate Marketing Div.</p>	<p>Mar. 2017 Corporate Vice President, General Manager in Finance, Corporate Planning Div., In charge of Public Relations, Corporate Planning Div. Mar. 2020 Corporate Vice President, In charge of Compliance, Deputy General Manager, Corporate Planning Div., General Manager in Finance, Corporate Planning Div. Mar. 2021 Senior Executive Officer, In charge of Compliance, Deputy General Manager, Corporate Planning Div., General Manager in Finance, Corporate Planning Div. May. 2021 Director, Senior Executive Officer, In charge of Compliance, Deputy General Manager, Corporate Planning Div., General Manager in Finance, Corporate Planning Div. (incumbent)</p>
<p><b>Yuichiro Kato</b> (October 20, 1969) <b>Outside Director</b> Number of shares of the Company held: 16 hundred <b>Independent</b></p>		<p>Apr. 1992 Joined Nichirei Corporation Apr. 1995 Joined DAIKO ADVERTISING INC. Apr. 2003 Associate professor of industrial strategy engineering, Graduate School of Engineering, Nagoya Institute of Technology Visiting researcher, Business Knowledge Bureau, DAIKO ADVERTISING INC. Jan. 2015 Member, The Deming Prize Examination Committee, Union of Japanese Scientists and Engineers (incumbent) Oct. 2015 Representative Partner, Brand Design LLC (currently Brand Design Co., Ltd.) Specially-appointed professor, Industry-Academia-Government Collaboration Center, Nagoya Institute of Technology Apr. 2018 Professor, Vocational Ability Development Institute, Polytechnic University administrated by the Ministry of Health, Labour and Welfare Member,</p>	<p>The Japan Quality Recognition Prize Examination Committee, Union of Japanese Scientists and Engineers (incumbent) Nov. 2018 Representative Director, Brand Design Co., Ltd. (incumbent) Jun. 2019 Professor, Project for Organization for Co-Creation Research and Social Contribution, Nagoya Institute of Technology (incumbent) May. 2020 Outside Director, Member of the Audit and Supervisory Committee of the Company May. 2021 Outside Director of the Company (incumbent)  <b>[Significant concurrent position]</b> Representative Director, Brand Design Co., Ltd. Professor, Project for the Institute for Industry-Academia-Government-Finance Collaboration, Nagoya Institute of Technology</p>

**Yuji Nakayama**  
(May 17, 1960)  
**Director, Member of the Audit and Supervisory Committee (full-time)**  
Number of shares of the Company held: 282 hundred



Mar. 1983 Joined the Company  
Jun. 2010 Director, General Manager, Accounting Div.  
Jun. 2012 Corporate Vice President  
Jun. 2013 Director, Corporate Vice President  
Mar. 2017 Director, Corporate Vice President, General Manager, Human Resources & General Affairs Div.  
Mar. 2019 Director, Corporate Vice President, In charge of Human Resources & General Affairs Div. and audit  
May. 2019 Director, Member of the Audit and Supervisory Committee (full-time, incumbent)

**Koichi Tsukahata**  
(September 22, 1960)  
**Director, Member of the Audit and Supervisory Committee (full-time)**  
Number of shares of the Company held: 88 hundred



Mar. 1985 Joined the Company  
Mar. 2009 Motion Control Div., General Manager, Yahata Factory  
Jun. 2010 Deputy General Manager, Motion Control Div.  
Mar. 2013 Trustee, Director, President, YASKAWA ELECTRIC (SHENYANG) CO., LTD.  
Mar. 2018 Trustee, In charge of audit  
May. 2018 Director, Member of Audit and Supervisory Committee (full-time, incumbent)

**Yoshiki Akita**  
(February 12, 1952)  
**Outside Director, Member of the Audit and Supervisory Committee**  
Number of shares of the Company held: 173 hundred  
**Independent**



Oct. 1978 Joined Japan Office, Arthur Andersen & Company  
Sep. 1984 Registered as a Certified Public Accountant  
Aug. 1986 In charge of Japan Business, Chicago Office, Arthur Andersen LLP  
Jan. 1994 International Partner, Arthur Andersen LLP  
Jun. 1995 Representative Member, Asahi Audit Corp. (currently KPMG AZSA LLC) Representative Director, Asahi Arthur Andersen, Ltd. (currently PwC Consulting LLC)  
Jan. 2002 Representative Director, President and CEO, Asahi Arthur Andersen, Ltd.  
Jun. 2002 Representative Director and President, KPMG Consulting Co., Ltd. (currently PwC Consulting LLC)

Mar. 2006 Outside Director, Bell-Park Co., Ltd. (incumbent)  
Sep. 2007 Representative Director and Chairman and Executive Director, Layers Consulting Co., Ltd. (incumbent)  
Jun. 2012 Outside Director of the Company  
Jun. 2015 Outside Director, Member of the Audit and Supervisory Committee (incumbent)

**[Significant concurrent position]**

Representative Director and Chairman and Executive Director, Layers Consulting Co., Ltd.  
Outside Director, Bell-Park Co., Ltd.

**Junko Sasaki**  
(January 12, 1960)  
**Outside Director, Member of the Audit and Supervisory Committee**  
Number of shares of the Company held: 18 hundred  
**Independent**



Apr. 1983 Joined IBM Japan Ltd  
Jan. 2007 Executive Officer, APAC & Japan, Technical Sales Support, IBM Japan Ltd  
Jan. 2011 Joined Microsoft Japan Co., Ltd., Executive, General Manager, Customer Service & Support  
Feb. 2015 Joined WEIC Corporation  
Apr. 2015 Director, Vice President, WEIC Corporation  
Jan. 2016 Joined FireEye, Inc., Vice President  
Dec. 2016 Joined Sartorius Japan K.K. President & CEO  
May. 2018 Outside Director, Member of the Audit and Supervisory Committee of the Company (incumbent)

Jun. 2019 External Director, Sumitomo Mitsui Trust Bank, Limited (incumbent)  
Jun. 2020 Outside Director, HANWA Co., Ltd. (incumbent)  
Sep. 2020 External Director, Gemini Strategy Group Inc. (incumbent)

**[Significant concurrent position]**

External Director, Sumitomo Mitsui Trust Bank, Limited  
Outside Director, HANWA Co., Ltd.  
External Director, Gemini Strategy Group Inc.

**Hideo Tsukamoto**  
(July 25, 1980)  
**Outside Director, Member of the Audit and Supervisory Committee**  
Number of shares of the Company held: 0  
**Independent**



Apr. 2003 Entered the Legal Training and Research Institute, Supreme Court of Japan  
Oct. 2004 Graduated from the Legal Training and Research Institute, Supreme Court of Japan (57th Term), Registered as an Attorney (member of Daini Tokyo Bar Association), Joined Anderson Mori Law Office (currently Anderson Mori & Tomotsune LPC)  
Nov. 2010 Worked at Civil Affairs Bureau, the Ministry of Justice (in charge of planning and formulation of Revised Companies Act)  
Jan. 2013 Partner, Anderson Mori & Tomotsune LPC (incumbent)  
Apr. 2014 Part-time lecturer, Faculty of Law, The University of Tokyo  
Jan. 2016 Expert Member, Case Study Committee, The Japan Audit & Supervisory Board Members Association (incumbent)

Dec. 2017 Member (2nd term), Corporate Governance System (CGS) Workshop, the Ministry of Economy, Trade and Industry  
Jun. 2018 Outside Audit & Supervisory Board Member, JA MITSUI LEASING, LTD. (incumbent)  
May. 2019 Outside Director, Member of the Audit and Supervisory Committee of the Company (incumbent)  
Aug. 2019 Member, the Study Group on the Process of the General Meeting of Shareholders in the New Era, the Ministry of Economy, Trade and Industry

**[Significant concurrent position]**

Partner, Anderson Mori & Tomotsune LPC  
Outside Audit & Supervisory Board Member, JA MITSUI LEASING, LTD.

**Toshikazu Koike**  
(October 14, 1955)  
**Outside Director, Member of the Audit and Supervisory Committee**  
Number of shares of the Company held: 0  
**Independent**



Apr. 1979 Joined BROTHER INDUSTRIES, LTD.  
Aug. 1982 Seconded to Brother International Corporation (U.S.A.)  
Oct. 1992 Director, Brother International Corporation (U.S.A.)  
Jan. 2000 Director & President, Brother International Corporation (U.S.A.)  
Jun. 2004 Director, BROTHER INDUSTRIES, LTD.  
Jan. 2005 Director & Chairman, Brother International Corporation (U.S.A.)  
Apr. 2005 Director & Managing Executive Officer, BROTHER INDUSTRIES, LTD.  
Apr. 2006 Director & Senior Managing Executive Officer, BROTHER INDUSTRIES, LTD.  
Jun. 2006 Representative Director & Senior Managing Executive Officer, BROTHER INDUSTRIES, LTD.

Jun. 2007 Representative Director & President, BROTHER INDUSTRIES, LTD.  
Jun. 2018 Representative Director & Chairman, BROTHER INDUSTRIES, LTD. (incumbent)  
Jun. 2020 Outside Director, Toyo Seikan Group Holdings, Ltd. (incumbent)  
May. 2021 Outside Director, Member of the Audit and Supervisory Committee of the Company (incumbent)

**[Significant concurrent position]**

Representative Director & Chairman, BROTHER INDUSTRIES, LTD.  
Outside Director, Toyo Seikan Group Holdings, Ltd.

\* The information is based on the Securities Report for the 105th fiscal year.

## Executive Officers

### Managing Executive Officer

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**Akira  
Kumagae**



General Manager,  
Corporate Technology Div.

### Senior Executive Officers

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**Michael  
Stephen  
Knapek**



Regional Manager,  
The Americas

**Junichi  
Nakano**



Regional Manager,  
Asia

**Nobuaki  
Jinnouchi**



General Manager,  
Drives Div.

**Kenji Ueyama**



General Manager,  
Motion Control Div.  
Department Manager,  
Business Planning  
Dept., Motion Control  
Div.

**Bruno  
Schnekenburger**



Regional Manager,  
Europe

**Akinori  
Urakawa**



General Manager,  
Global Marketing Div.

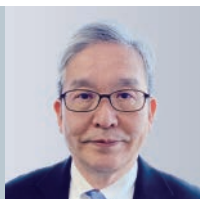
**Tatsuya  
Yamada**



General Manager,  
Environmental & Social  
Systems Div.

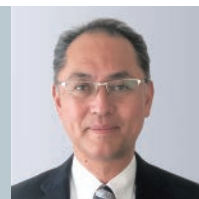
## Executive Officers

**Toshihiro  
Kose**



Manager,  
Industry Research Office,  
Global Marketing Div.

**Masahiko  
Okura**



Managing Director,  
YASKAWA ELECTRIC  
(SHENYANG) CO.,  
LTD.

**Tatsuya  
Fukunaga**



Department Manager,  
Engineering Dept.,  
Robotics Div.

**Takenori  
Otsuka**



General Manager,  
Human Resources &  
General Affairs Div.

**Yukio  
Tsutsui**



Technology  
Cooperation &  
Development  
Corporate Technology  
Div.

**Ayumi  
Hayashida**



General Manager,  
Corporate  
Communications Div.

**Michiaki  
Higuchi**



Department Manager,  
Procurement Dept.,  
Production  
Management &  
Operations Div.

**Ryuta  
Matsutani**



General Manager,  
Quality & Service Div.  
Department Manager,  
Market Quality  
Assurance Dept.,  
Quality & Service Div.

**Hiroshi  
Takata**



General Manager,  
Corporate Sales &  
Marketing Div.  
Tokyo Branch Office  
General Manager

**Shunrin  
Mizutani**



Managing Director,  
YASKAWA TSUSHO  
(SHANGHAI) CO., LTD.

**Yasushi  
Ichiki**



Department Manager,  
Corporate Planning  
Dept.,  
Corporate Planning &  
Finance Div.

**Manabu  
Okahisa**



Managing Director,  
YASKAWA ELECTRIC  
(CHINA) CO., LTD.

## 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.

### MOTION CONTROL

- AC servo & controller business

AC servo motors are incorporated in production equipment for electronic parts, semiconductor products, etc., that require high precision.



AC servo Σ-X series

- Drives business

AC drives are used in social infrastructure, such as HVAC, escalators and elevators, and contribute to energy-saving.



Yaskawa AC drive new series



Matrix converter U1000



PM motor

### ROBOTICS

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

Our main product is vertical articulated robots, which contribute to automation of welding, painting, assembly and transportation at production sites in various fields, mainly in the automotive market.



Robot controller YRC1000



Arc-welding robot MOTOMAN-AR1730



Collaborative robot MOTOMAN-HC20DT

### SYSTEM ENGINEERING

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

Our advanced technological capabilities in system engineering and electrical products contribute to the automation and stable operation of steel plants, water treatment plants and large crane equipment, and to the expansion of the use of renewable energy in environmental energy markets such as photovoltaic power generation and large-scale wind power generation.



Generator and converter for large-scale wind turbines



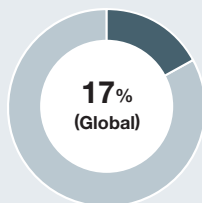
Medium-voltage matrix converter



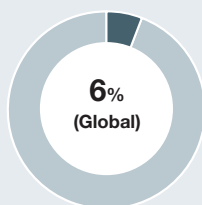
PV inverter

**Market Share (Company estimate)**

AC servo drives

**Market Share (Company estimate)**

AC drives

**Breakdown of Revenue by Region in FY2020**

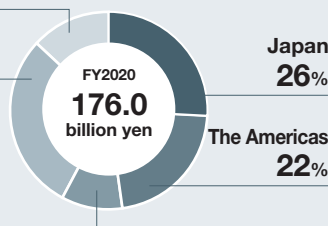
Asian Countries except China 13%

China 29%

Japan 26%

The Americas 22%

EMEA 10%

**Net Sales/Revenue, Operating Profit, Operating Profit Ratio\***

(Billions of yen) (%)



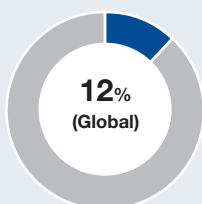
■ Net sales/Revenue (Left axis)

■ Operating profit (Left axis)

— Operating profit ratio (Right axis)

**Market Share (Company estimate)**

Industrial robot

**Breakdown of Revenue by Region in FY2020**

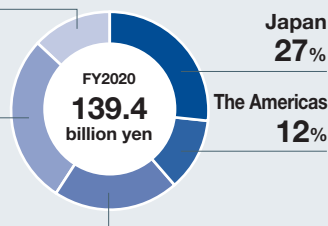
Asian Countries except China 13%

China 28%

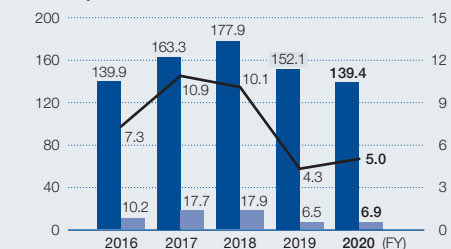
Japan 27%

The Americas 12%

EMEA 20%

**Net Sales/Revenue, Operating Profit, Operating Profit Ratio\***

(Billions of yen) (%)



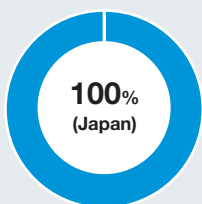
■ Net sales/Revenue (Left axis)

■ Operating profit (Left axis)

— Operating profit ratio (Right axis)

**Market Share (Company estimate)**

Steel plant systems (Blast furnace)

**Breakdown of Revenue by Region in FY2020**

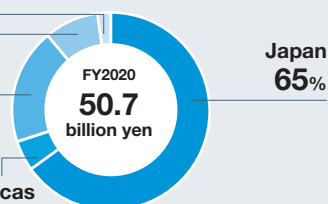
Asian Countries except China 2%

China 9%

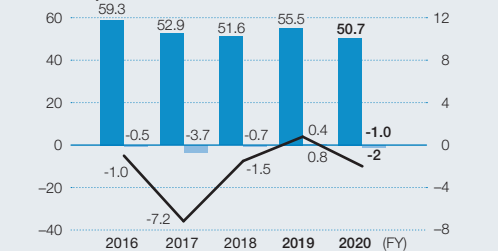
EMEA 19%

Japan 65%

The Americas 5%

**Net Sales/Revenue, Operating Profit, Operating Profit Ratio\***

(Billions of yen) (%)



■ Net sales/Revenue (Left axis) ■ Operating profit (Left axis)

— Operating profit ratio (Right axis)

\* Results up to FY2017 are based on Japanese GAAP, and results after FY2018 are based on International Financial Reporting Standards (IFRS.)

# MOTION CONTROL

## • AC Servo & Controller Business

Enhancing machine performance as major components incorporated in production equipment

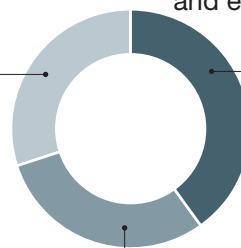


### Revenue Breakdown by Application (FY2020 Results)



Other  
(Packaging, textile,  
injection molding, etc.)

Approx. 30%

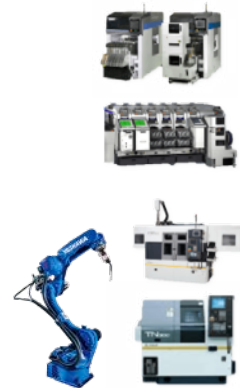


Electronics-related industries  
including semiconductor, FPD  
and electronic components

Approx. 40 %

Machinery-related  
industries including  
machine tool, metal  
processing, press  
machine and robots

Approx. 30 %



## Role of AC Servo Drives in Manufacturing DX

In the manufacturing industry, it is important to collect, analyze and utilize various data from equipment in order to improve manufacturing productivity. AC servo drive is a key component for driving the various devices used in manufacturing. By using AC servo drive, which controls the motion of equipment, as a sensor and acquiring various data from the equipment, we can provide new added

value to manufacturing sites, such as preventive maintenance of equipment and improvement of production quality. The  $\Sigma$ -X series, which was launched in March 2021, not only offers the industry's best motion performance, but also enhances the ability to utilize sensing data, thereby contributing to the enhancement of added value of customers from the manufacturing site.

## FY2020 Results and FY2021 Plans

In FY2020, in addition to growth in revenue due to increased demand in China for new infrastructure-related products such as 5G and new energy, robust global demand for capital investment in the semiconductor and electronic components markets such as smartphones and data centers contributed to robust sales.

The  $\Sigma$ -X series of AC servo drive was launched in March 2021. In FY2021, we will continue to further evolve "i3-Mechatronics" solution capabilities and expand the range of components that respond to the changes in production systems. Through these efforts, we aim to build a highly profitable structure.

## ▶ 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

### Weaknesses : Challenges

- Speed-up of the process from development to mass production
- Reinforcement of production response to rapid changes in demand
- Evolution from component sales to sales of integrated solutions

### Opportunities : Business Opportunities

- Growing demand for industrial automation
- Industry sophistication, including 5G, IoT, and autonomous-driving

### Threats : Business Risks

- Supply chain disruptions associated with geopolitical risks
- Pricing strategies by manufacturers in emerging countries
- Emergence of an actuator that can surpass the motor in performance and have the potential to replace the motor

## "Challenge 25 Plus" (FY2019 – FY2022) Goals

Establish a global No.1 position as a leading company by further evolving "i<sup>3</sup>-Mechatronics" solution capabilities and expanding the range of components that respond to the changes in production systems, and by building a highly profitable structure

## ▶ Progress on the "Challenge 25 Plus"

Progress of Measures	FY2022 Financial Targets
<b>Development:</b> <ul style="list-style-type: none"> <li>• Accelerate development of strategic products that realize "i<sup>3</sup>-Mechatronics"</li> </ul>	<b>Revenue:</b> <b>221.0</b> billion yen
<b>Production:</b> <ul style="list-style-type: none"> <li>• Deployment of the YASKAWA Solution Factory concept to overseas production sites</li> </ul>	<b>Operating profit:</b> <b>43.7</b> billion yen
<b>Sales:</b> <ul style="list-style-type: none"> <li>• Launch of the <math>\Sigma</math>-X series of AC servo drive to increase customer value with the industry's best motion performance and digital data solution</li> <li>• Strengthen relationships with customers and create sales opportunities through top-level sales activities</li> </ul>	<b>Operating profit ratio:</b> <b>19.8</b> % <small>*Motion Control segment</small>
<b>Improved profitability:</b> <ul style="list-style-type: none"> <li>• Improving productivity in indirect operations through the application of the latest production methods</li> </ul>	

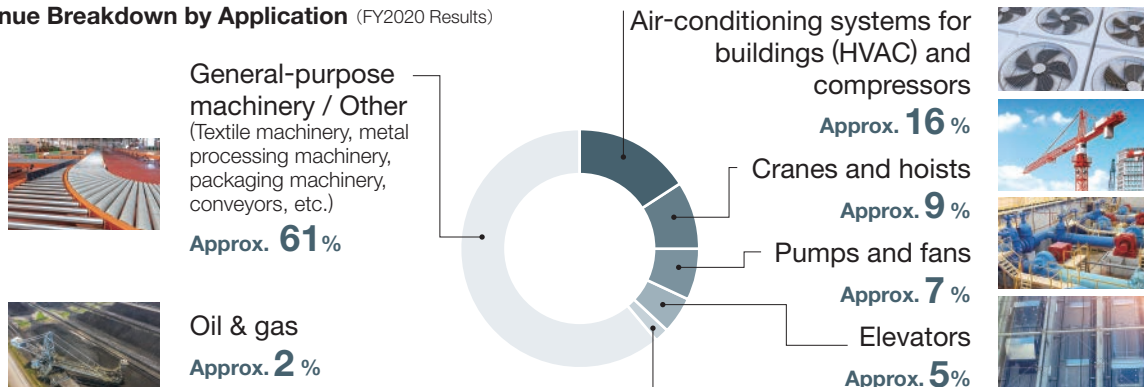
# MOTION CONTROL

## •AC Drive Business

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



### Revenue Breakdown by Application (FY2020 Results)



## Role of AC Drives in Society and Industry

AC drive is a device that can continuously change the motor rotation speed by converting the voltage and frequency of the power supply. The use of AC drive makes advanced motor control possible, while at the same time contributing to energy conservation by operating only as much as necessary. AC drive may be widely applied to machinery and equipment in which motors are used, and the market size is estimated to reach 1.5 trillion yen worldwide. In the past,

drivers of market growth for AC drives were (1) the advancement of electrification accompanying the advancement of industry, and (2) the rise of emerging economies. Recently, however, as part of efforts to realize sustainability in each country, attention has been focused once again on the energy conservation effects of using AC drive. AC drive is increasing its presence as an indispensable device for the sustainable development of society and industry.

## FY2020 Results and FY2021 Plans

FY2020 was a tough year. In particular, the prolonged slump in the U.S. oil and gas market caused by the sharp decline in crude oil prices hurt revenue. In order to establish a business structure that is less susceptible to fluctuations in specific markets, we are working to realize the "Vision 2025" by accelerating the expansion of applications (HVAC, fans, pumps, etc.) that emphasize energy-saving

performance.

We expect demand to recover in FY2021. Since March 2021, orders have been increasing rapidly on a global basis, and revenue is expected to be capped by production capacity as well as a shortage of parts due to the global economic recovery. We will strive to maximize revenue by preparing to provide customers with the

quantities they need. In addition, the lineup of the new AC drive series is almost complete, and the transition to the new series will begin in earnest. The higher proportion of

revenue in the Americas and China, which have relatively high profit margins, and the expansion of the new series ratio are expected to improve profit margins.

## ► 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

- Accelerated volume expansion, growth scenario
- Improvement of development speed including new technologies
- Improvement in cost competitiveness
- In-house production of main parts

### 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

- Movement toward in-house production by some customers
- High dependence on specific markets such as oil and gas markets
- Parts procurement risk due to rapid growth in 5G and EV
- Rise of emerging market competitors

## “Challenge 25 Plus” (FY2019 – FY2022) Goals

Steadily expand revenue of Yaskawa’s strong area, driving-performance-oriented applications (general machinery, oil and gas, elevators, cranes, etc.), as well as market development for energy-saving performance-oriented applications, for which demand is expected to expand in the medium term, by leveraging the proposal capabilities of PM motors and AC drive, thereby boosting growth potential

## ► Progress on the “Challenge 25 Plus”

Progress of Measures	FY2022 Financial Targets
<b>Development:</b> <ul style="list-style-type: none"> <li>• Completion of product lineup for AC drive’s new series and development of PM motors for HVAC</li> </ul>	<b>Revenue:</b> <b>221.0</b> billion yen
<b>Production:</b> <ul style="list-style-type: none"> <li>• Established a high-efficiency production system through the introduction of a new production system</li> </ul>	<b>Operating profit:</b> <b>43.7</b> billion yen
<b>Sales:</b> <ul style="list-style-type: none"> <li>• Strengthened systems to identify potential needs together with customers</li> <li>• Strengthened development of energy-saving markets, particularly in Asia</li> </ul>	<b>Operating profit ratio:</b> <b>19.8 %</b>
<b>Improved profitability:</b> <ul style="list-style-type: none"> <li>• Increase the added value ratio by expanding sales of the new series globally</li> </ul>	<small>*Motion Control segment</small>

# ROBOTICS

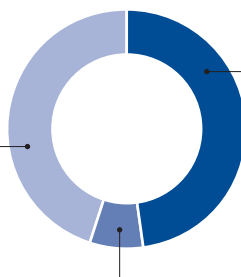
Responding to the growing need for labor-saving and automation at production sites, we are taking on the challenge of realizing a new industrial automation revolution.



## Revenue Breakdown by Application (FY2020 Results)



General / Other  
(Handling, etc.)  
**Approx. 45%**



Automotive-related  
applications  
(Arc welding, painting, etc.)  
**Approx. 48%**



Semiconductor-  
and LCD-  
related applications  
**Approx. 7%**



## Role of Robots in Manufacturing

Industrial robots contribute to automation of welding, painting, assembly, and transportation in a variety of fields, including the automotive market. In recent years, against the backdrop of labor shortages and the prevention of the spread of infectious diseases, demand in general industrial fields such as the food, pharmaceuticals and cosmetics and the 3C market (computers, consumer appliances and communications equipment) has increased.

In the field of manufacturing in the future, in addition to the

realization of multi-product variable-volume production, there is expected to be a growing need for smarter manufacturing by improving production efficiency, quality, and traceability. Under these circumstances, Yaskawa will further enhance the judgment and work capabilities of robots, contribute to further automation and optimization in existing manufacturing sites, and take on the challenge of realizing an industrial automation revolution by providing new automation solutions in areas where robots have traditionally been difficult to apply.

## FY2020 Results and FY2021 Plans

In the robotics business in FY2020, capital investment recovered globally toward the end of the fiscal year in the automotive sector, which is a key market, but growth in revenue was sluggish in the first half due largely to the impact of the COVID-19 infection. On the other hand, sales of semiconductor robots were strong, and capital investment in the general industrial sector was also seen against the backdrop of the growing need for automation, particularly in China. In this environment,

Yaskawa introduced new products, such as multi-purpose robots, new palletizing robots, and semiconductor wafer handling robots, in an effort to expand its product lineup.

In FY2021, although the outlook remains uncertain due to the prolonged spread of the COVID-19, we expect a steady global recovery due to the increasing need for automation in a wide range of fields. Yaskawa will strive to increase earnings by improving its ability to adjust production capacity to respond to

fluctuations in demand in order to capture a recovery in key markets and new growth markets. In addition, we will continue to develop new products and application technologies that

realize the "i<sup>3</sup>-Mechatronics" concept, and will implement solution proposals based on this concept to achieve high growth by expanding our business domains.

## ► SWOT Analysis of Business

### Strengths : Strengths of Our Business and Differentiation

- Developed Japan's first all-electric articulated robot in 1977
  - Respond to diversified automation needs with the world's broadest product lineup
- The servo motor, which is the most important factor for the performance of the robot, is manufactured in-house
  - Securing competitive advantage by improving robot performance and reducing production costs
- Cross-business development system utilizing YASKAWA Technology Center

### Weaknesses : Challenges

- Strengthen production flexibility in response to rapid changes in demand and improve profitability
- Develop new technologies and business fields through open innovation
- Establishing and expanding sales channels of collaborative robots

### Opportunities : Business Opportunities

- Expanded demand for labor saving and automation in general industries
- Manufacturing innovation in the automobile industry (including the shift to EVs)
- Enhancement of production through IoT

### Threats : Business Risks

- Decline in demand for capital investment due to geopolitical risks
- Rise of emerging manufacturers

## "Challenge 25 Plus" (FY2019 – FY2022) Goals

Based on our strategy to provide solutions to end users through the implementation of the "i<sup>3</sup>-Mechatronics" concept, achieve growth that exceeds the growth of the robot market by expanding our business domain, and realize a business structure in which profitability will significantly increase along with volume growth.

## ► Progress on the "Challenge 25 Plus"

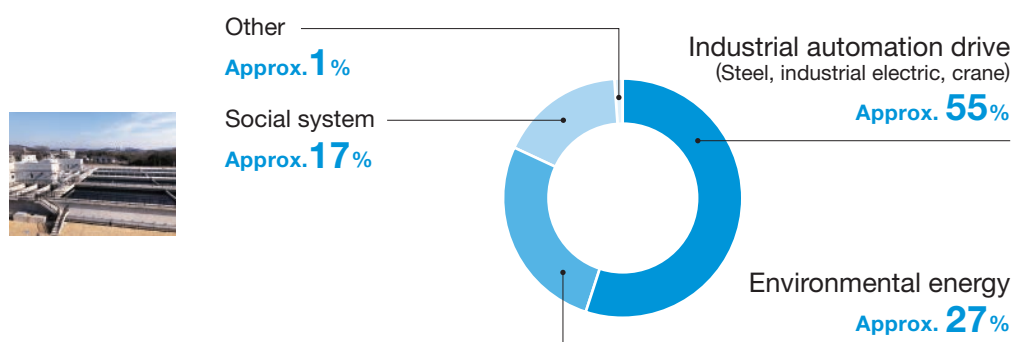
Progress of Measures	FY2022 Financial Targets
<b>Development:</b> <ul style="list-style-type: none"> <li>• Based on the concept of "i<sup>3</sup>-Mechatronics," we have developed products with the aim of achieving autonomous, distributed manufacturing driven by data (Autonomous robots, digital twin, etc.)</li> <li>• Expand lineup of collaborative robots, versatile robots for general markets, SCARA robots, palletizing robots, semiconductor wafer handling robots, etc.</li> </ul> <b>Production:</b> <ul style="list-style-type: none"> <li>• Full-scale mass production of robots began in Slovenia</li> <li>• Improved productivity through introduction of collaborative robot and YASKAWA Solution Factory concept</li> </ul> <b>Sales:</b> <ul style="list-style-type: none"> <li>• Automotive market: Proposed total solutions based on the "i<sup>3</sup>-Mechatronics" concept to respond to changes in production processes and expansion of the automation domain</li> <li>• General market: Promoted activities to expand the robotics field in growth markets centered on the China 3C market</li> </ul> <b>Improved profitability:</b> <ul style="list-style-type: none"> <li>• Increased value added rate through production automation</li> <li>• Global capacity realignment and optimization of production systems and cost structures</li> </ul>	<b>Revenue:</b> <b>117.7</b> billion yen <b>Operating profit:</b> <b>19.5</b> billion yen <b>Operating profit ratio:</b> <b>11.0</b> %

# SYSTEM ENGINEERING

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



## Revenue Breakdown by Application (FY2020 Results)



## Business Overview of System Engineering

Yaskawa Group has a wealth of experience in the development, design, and production of industrial system electrical equipment, including large steel plant facilities, over many years. The system engineering technology and electrical products cultivated to date contribute to the automation and stable operation of facilities in steel plants, water treatment plant and large crane equipment markets.

We are also contributing to the expansion of the use of renewable energy in environmental energy markets such as solar power generation and large-scale wind power generation. We provide total solutions with advanced system technology and high-quality products, build reliable social and industrial systems, and contribute to a comfortable and sustainable society.

## FY2020 Results and FY2021 Plans

In FY2020, although sales of PV inverter for solar power generation were sluggish, sales of social system-related products such as electrical appliances for large-scale wind power generation and electrical systems for water and sewage treatment remained firm in the environmental energy and social systems businesses.

In the industrial automation drive business, we were able to limit revenue decline to a small extent by offering remote system proposals to customers and conducting remote test runs, especially when we were unable to conduct activities overseas due to the spread of COVID-19.

Operating profit decreased due to the provision of temporary product repair costs.

In FY2021, we will continue to supply products to the growing offshore wind power market and expand sales for large-scale solar power generation applications in the environmental and social systems business, in view of the growing market for decarbonization. We will also contribute to a decarbonized society by developing PV inverter for the home consumption market and for replacement demand. In the social systems-related business, we will continue to maintain and improve our highly profitable structure while accelerating our digitalization efforts through development utilizing AI, CPS and IoT. In the industrial automation drive business, we will focus on the recovery of the market, the expansion of investment in the EV related market and carbon neutral market, and the large-scale investment plan for automated cranes in Southeast Asia.

## ▶ SWOT Analysis of Business

### Strengths: Strengths of Our Business and Differentiation

- Power conversion technology and automation/remote technology for energy saving and high efficiency
- Reliable technological and customer service capabilities that can meet the needs for PV inverters and electrical products for large-scale wind power generation in the diversifying renewable energy market, as well as a rich record of delivery
- 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
- Creation of business synergies

### Opportunities: Business Opportunities

- Increasing demand for renewable energy for a decarbonized society
- The market for wind power generation grows over the medium to long term, particularly for offshore wind power.
- Need for labor-saving and high-efficiency electricity systems for water and sewage systems using IoT, AI and robots
- Increase in the investment for production of new materials for EVs
- Full automation and remote operation of harbor cranes
- Responding to carbon neutrality initiatives

### Threats: Business Risks

- Oligopolization of wind turbine manufacturers and in-house production
- Modification of feed-in tariffs and grid interconnection regulations for renewable energy
- Intensifying cost competition
- Decline in infrastructure investment in Japan

## “Challenge 25 Plus” (FY2019 – FY2022) Goals

Achieve stable earnings by strengthening profitability in the environmental energy businesses and pursuing high profitability in the social systems and industrial automation drive businesses

### ▶ Progress on the “Challenge 25 Plus”

Progress of Measures	FY2022 Financial Targets
<b>Development:</b> <ul style="list-style-type: none"> <li>• Start of development of PV inverter for private consumption and replacement demand</li> <li>• Promotion of miniaturization of induction motors and development of large-capacity drive panels and integrated controllers</li> </ul> <b>Production:</b> <ul style="list-style-type: none"> <li>• Stable supply of large generators for wind power generation</li> <li>• Centralized product development and production of industrial drive system equipment and motors, control panel manufacturing, engineering, and after-sales service</li> </ul> <b>Sales:</b> <ul style="list-style-type: none"> <li>• Launched PV inverter XGI 1500 for photovoltaic power generation</li> <li>• Continued orders for large-scale wind power projects</li> <li>• Implementation and examination of value-added proposals for social systems, steel, industrial electric, and cranes</li> </ul> <b>Improved profitability:</b> <ul style="list-style-type: none"> <li>• Strengthen approaches to EV-related markets and high-profit markets, and withdraw from unprofitable fields</li> <li>• Increase added value through thorough cost reduction</li> </ul>	<b>Revenue:</b> <b>51.0</b> billion yen <b>Operating profit:</b> <b>2.0</b> billion yen <b>Operating profit ratio:</b> <b>3.9</b> %

# 10-Year Financial Data

Japanese GAAP					
(Fiscal year)	2011	2012	2013	2014	2015
Net sales	307,111	310,383	363,570	400,153	411,260
Gross profit	79,571	82,108	108,139	126,890	134,147
Operating profit	14,818	13,070	25,702	31,532	36,730
Profit before income taxes	15,353	12,125	25,717	34,413	35,202
Profit attributable to owners of parent	8,432	6,800	16,964	24,819	22,365
<b>Business Segment Information*1*2</b>					
Motion Control	Net sales	149,410	144,333	162,346	188,116
	Operating profit	5,824	3,248	16,444	21,748
	Operating profit ratio (%)	3.9	2.3	10.1	11.6
Robotics	Net sales	101,065	110,223	122,543	135,956
	Operating profit	7,014	8,365	9,511	10,558
	Operating profit ratio (%)	6.9	7.6	7.8	9.9
System Engineering	Net sales	35,520	37,263	35,327	40,980
	Operating profit	1,917	1,504	-5	-768
	Operating profit ratio (%)	5.4	4.0	-0.0	-1.9
<b>Sales by Destination*3</b>					
Japan	143,019	143,456	150,101	144,246	135,495
The Americas	43,985	51,113	58,481	72,616	85,088
Europe	33,939	32,047	42,499	46,921	52,011
China	85,276	48,555	67,165	85,017	81,938
Asia except China	32,752	41,430	47,761	52,355	
Other	890	2,456	3,892	3,590	4,370
Overseas sales ratio (%)	53.4	53.8	58.7	64.0	67.1
<b>Cash Flow</b>					
Cash flows from operating activities	6,391	24,640	23,972	29,023	31,954
Cash flows from investing activities	-11,874	-18,058	-16,942	-27,874	-22,421
Free cash flows	-5,483	6,582	7,029	1,149	9,533
Cash flows from financing activities	13,592	-9,053	-5,983	-1,471	-2,601
Cash and cash equivalents at end of period	20,206	19,389	22,992	24,347	31,656
<b>Per Share Information</b>					
Earning (yen)	33.51	27.03	67.42	98.45	84.71
Dividends (yen)	10.00	10.00	12.00	20.00	20.00
<b>End of the Fiscal Year</b>					
Total assets	279,072	302,518	340,506	388,205	373,533
Interest-bearing debt	58,612	54,684	55,528	52,430	48,426
Shareholders' equity	100,109	112,218	134,076	171,388	181,281
<b>Management and Financial Indicators</b>					
Operating profit ratio (%)	4.8	4.2	7.1	7.9	8.9
ROE: Return on equity (%)	8.7	6.4	13.8	16.3	12.8
Shareholders' equity ratio (%)	35.9	37.1	39.4	44.1	48.5
Debt-to-equity ratio (times)	0.59	0.49	0.41	0.31	0.27
Dividend payout ratio (%)	29.8	37.0	17.8	20.3	23.6
<b>Exchange rate</b>					
U.S. dollar (yen)	79.3	81.9	99.6	108.2	120.8
Euro (yen)	109.6	105.7	132.7	139.7	133.0

\*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.

\*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 For FY2010 and FY2011, figures for Japan, the Americas, Europe, Asia, and Other were disclosed.

Japanese GAAP		IFRS			(millions of JPY)
2016	2017 <sup>*4</sup>	2018	2019	2020	(Fiscal year)
394,883	448,523	474,638	410,957	<b>389,712</b>	Revenue
124,018	154,174	156,353	124,496	<b>116,370</b>	Gross profit
30,409	54,126	53,098	24,198	<b>27,180</b>	Operating profit
29,910	53,556	55,051	24,642	<b>27,172</b>	Profit before tax
20,397	39,749	42,524	15,572	<b>18,927</b>	Profit attributable to owners of parent
					<b>Business Segment Information<sup>*1*2</sup></b>
172,025	212,095	213,260	180,446	<b>176,014</b>	Revenue
22,772	41,729	34,697	20,554	<b>24,576</b>	Operating profit
13.2	19.7	16.3	11.4	<b>14.0</b>	Operating profit ratio (%)
139,993	163,379	177,995	152,170	<b>139,494</b>	Revenue
10,253	17,761	17,986	6,503	<b>6,907</b>	Operating profit
7.3	10.9	10.1	4.3	<b>5.0</b>	Operating profit ratio (%)
59,354	52,934	51,627	55,535	<b>50,763</b>	Revenue
-591	-3,794	-770	469	<b>-1,030</b>	Operating profit
-1.0	-7.2	-1.5	0.8	<b>-2.0</b>	Operating profit ratio (%)
					<b>Revenue by region</b>
134,205	133,896	154,539	151,481	<b>135,908</b>	Japan
74,691	83,078	84,908	73,906	<b>58,928</b>	The Americas
50,736	60,879	70,436	61,275	<b>54,822</b>	EMEA
81,246	103,313	103,404	79,974	<b>97,938</b>	China
49,798	63,397	60,914	43,892	<b>41,818</b>	Asia except China
4,205	3,957	435	428	<b>296</b>	Other
66.0	70.1	67.4	63.1	<b>65.1</b>	Overseas revenue ratio (%)
					<b>Cash Flow</b>
33,752	46,054	34,347	21,480	<b>39,602</b>	Net cash provided by operating activities
-18,936	-18,852	-27,111	-20,645	<b>-9,601</b>	Net cash used in investing activities
14,816	27,202	7,236	835	<b>30,000</b>	Free cash flows
-16,453	-14,820	-10,268	491	<b>-20,284</b>	Net cash provided by (used in) financing activities
29,735	42,213	39,289	40,307	<b>50,953</b>	Cash and cash equivalents at end of period
					<b>Per Share Information</b>
76.60	149.35	161.00	59.42	<b>72.41</b>	Earnings per share (yen)
20.00	40.00	52.00	52.00	<b>24.00</b>	Dividends per share (yen)
					<b>End of the Fiscal Year</b>
387,512	441,249	463,965	450,127	<b>487,428</b>	Total assets
36,765	32,247	55,415	81,578	<b>76,543</b>	Interest-bearing debt
198,513	235,865	243,967	228,362	<b>246,266</b>	Equity attributable to owners of parent
					<b>Management and Financial Indicators</b>
7.7	12.1	11.2	5.9	<b>7.0</b>	Operating profit ratio (%)
10.7	18.3	17.9	6.6	<b>8.0</b>	ROE: Return on equity (%)
51.2	53.5	52.6	50.7	<b>50.5</b>	Ratio of equity attributable to owners of parent to total assets (%)
0.19	0.14	0.22	0.36	<b>0.31</b>	Debt-to-equity ratio (times)
26.1	26.8	32.3	87.5	<b>33.1</b>	Dividend payout ratio (%)
					<b>Average Exchange Rate</b>
108.4	111.5	110.5	109.0	<b>106.0</b>	U.S. dollar (yen)
119.2	128.8	128.9	121.4	<b>122.8</b>	Euro (yen)

<sup>\*4</sup> 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.

# Disclosure Policy and IR Activities

## Disclosure policy

### ■ Scope of reporting, etc.

Period covered	March 1, 2020 to February 28, 2021 (Certain contents include activities occurred in or after March 2021.)
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).

### ■ Editorial Policy

This report is prepared for a wide range of stakeholders, including shareholders and investors. This report is created with the aim of providing a well-balanced understanding of various aspects of the Group's business model and value creation, based on the theme of "communicating the future potential of Yaskawa."

This report is prepared with reference to the "International Integrated Reporting Framework" by the International Integrated Reporting Council (the IIRC) and "Guidance for Collaborative Value Creation" by Ministry of Economy, Trade and Industry with the aim of helping readers make a comprehensive assessment of Yaskawa's value.



### ■ Note on Forecasts Mentioned in this Report

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.

## Investor Relations 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.

### ■ YASKAWA Global Website Information

A wide range of IR related information is available.  
Please visit the following URL.



**Investor Relations** <https://www.yaskawa-global.com/ir>



**Sustainability** <https://www.yaskawa-global.com/company/csr>

### ■ External evaluation of IR activities (FY2020)

#### IR Website

Daiwa Investor Relations Co., Ltd.  
2020 "Internet IR Awards" Excellence Award

Nikko IR Co., Ltd.  
"Ranking of all listed companies' websites in FY2020"  
Best site (General award)

Morningstar Japan K.K.  
"Gomez IR Site Ranking 2020" Excellent company:  
Silver Prize

## Corporate Information and Stock Information

### Corporate Information (As of February 28, 2021)

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	14,892 Consolidated (including temporary employees)
Number of consolidated subsidiaries	65 companies
Number of affiliates accounted for by the equity method	10 companies

### Stock and Shareholder Information

(As of February 28, 2021)

#### ■ Stock Information

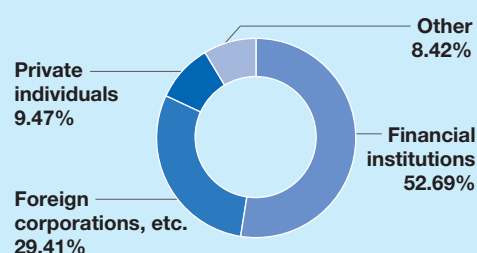
Stock exchange listings	Tokyo, Fukuoka
Securities code	6506 (Japan)
Share unit	100 shares
Business year	March 1 of each year to the last day of February of the following year
Record date for dividend payout	Last day of February and August 31 of each year
Number of shares outstanding	266,690 thousand
Number of shareholders	43,329

#### ■ Major Shareholders

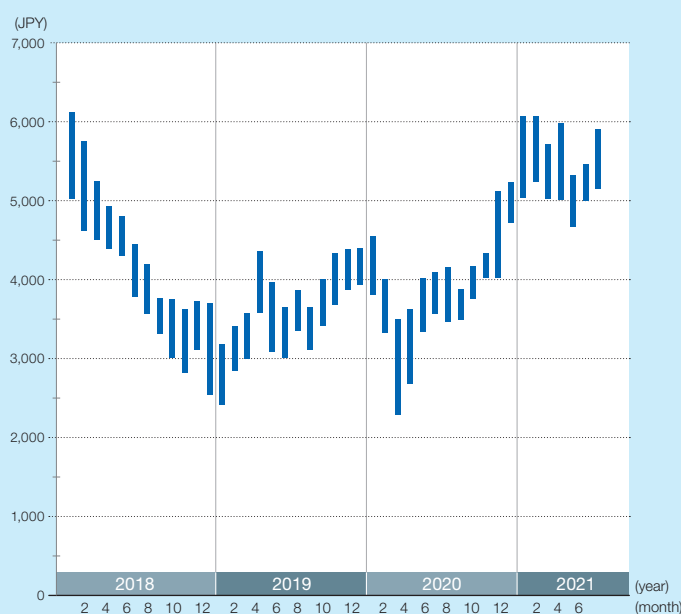
Major shareholders (Top 10 shareholders)	Number of Shareholding shares (Thousands)	ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	36,577	13.93
Custody Bank of Japan, Ltd. (Trust Account)	22,248	8.47
Mizuho Bank, Ltd. (MHBK)	8,100	3.09
Meiji Yasuda Life Insurance Company	7,774	2.96
Custody Bank of Japan, Ltd. (Sumitomo Mitsui Trust Bank, Limited Employee Retirement Benefit Trust Account)	7,439	2.83
SSBTC CLIENT OMNIBUS ACCOUNT	5,986	2.28
Custody Bank of Japan, Ltd. (Sumitomo Mitsui Trust Bank, Limited Reentrust Account, The Bank of Fukuoka, Ltd. Employee Retirement Benefit Trust Account)	5,100	1.94
THE DAI-ICHI LIFE INSURANCE COMPANY, LTD.	4,199	1.60
Custody Bank of Japan, Ltd. (Trust Account 7)	4,194	1.60
STATE STREET BANK WEST CLIENTTREATY 505234	4,065	1.55

Note: Treasury stock (4,121,962 shares) is deducted in the calculation of the shareholding ratio.

#### ■ Share Distribution by Shareholder Type



#### ■ Company Share Price (From January 2018 to July 2021)



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

### Signing the United Nations Global Compact

Yaskawa signed the United Nations Global Compact and was registered as a participating company on August 4, 2021. We will comply with and implement the 10 principles of the United Nations Global Compact, further promote responsible management as a global corporation, and contribute to the sustainability of society.



This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

# **YASKAWA**

## **YASKAWA ELECTRIC CORPORATION**

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