



# Technology & Tai-wa for Tomorrow

KOKUSAI ELECTRIC Group

CORPORATE REPORT 2022





## KOKUSAI ELECTRIC Group Corporate Slogan

# Technology & Tai-wa for Tomorrow

We always pursue advancing “Technology.”

We innovate by fusing our technologies, refined across multiple fields.

We always value “Tai-wa®.”

We develop the best solutions by drilling down to the core of each issue while respecting “Tai-wa®.”

We consistently lay the foundation for tomorrow

by responding to diverse needs with “Technology” and “Tai-wa®.”

Tai-wa is a Japanese word meaning of dialogue, conversation between people face-to-face to be willing to understand others with sense of empathy.

At times, subjects we have Tai-wa with can be things besides people.

For us, Tai-wa implies respecting every one of you, being sincere, and acting wholeheartedly, that is ‘an attitude itself towards work’. This is our group’s DNA that we value to have last forever.

\*Tai-wa is a registered trademark of KOKUSAI ELECTRIC CORPORATION.



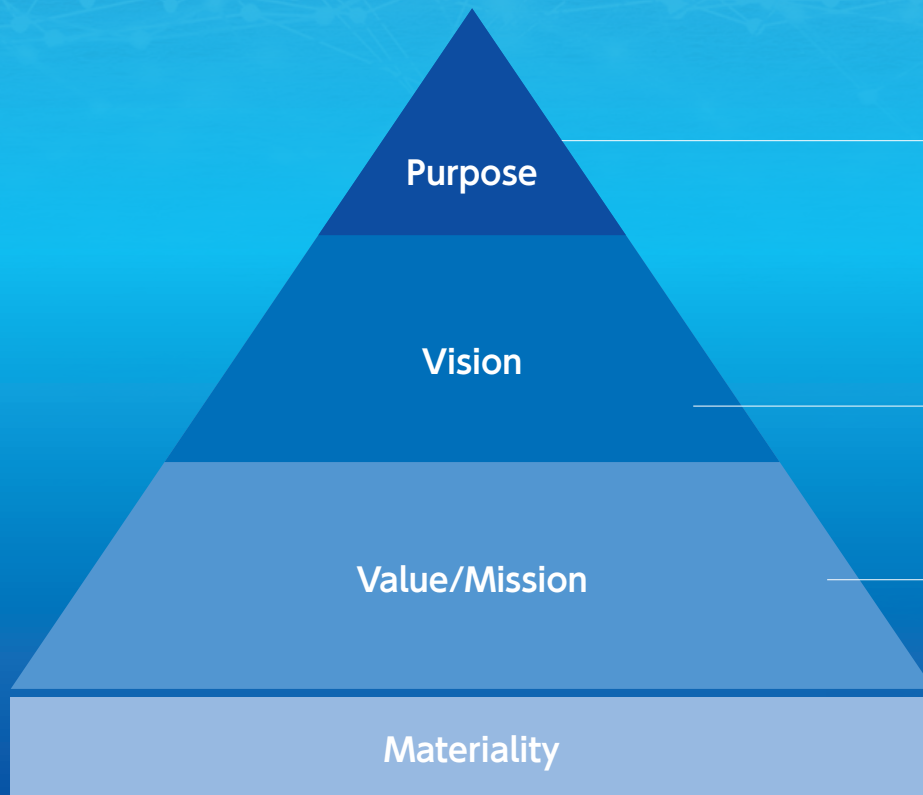


## New Corporate Statement

# KOKUSAI ELECTRIC Group's Corporate Philosophy

The Group has renewed its Corporate Statement and established the KOKUSAI ELECTRIC Way to further deepen "Tai-wa" with stakeholders and express its determination to support the future through technology. For a future shaped by creativity and innovation, we aim to be the best partner by responding to the diverse needs of a changing world by applying our accumulated "Technology" and emphasizing "Tai-wa".

## KOKUSAI ELECTRIC Way



## Purpose

### Technology & Tai-wa for Tomorrow

The KOKUSAI ELECTRIC Group supports a future where creativity and innovation are born out of Technology and Tai-wa.

## Vision

### Your Trusted Partner To Bring Technology Dreams To Life

Value/  
Mission

### Our Technology

- Refine technology
- Create technology
- Advance technology
- Captivate with technology

### Our Tai-wa

- Tai-wa with cutting-edge technology
- Tai-wa with the natural environment
- Tai-wa with social issues
- Tai-wa with ourselves



## OUR STORY / KOKUSAI ELECTRIC Group's Technology

### Providing high-quality semiconductor manufacturing equipment to the world through our robust global network

Among the hundreds of semiconductor fabrication processes, film forming is the most important.

Leveraging its world-class film forming technology, the KOKUSAI ELECTRIC Group develops and produces semiconductor manufacturing equipment to meet the needs of the world's foremost semiconductor manufacturers. We are supporting the ever- higher quality and performance of semiconductors.

Our mission is to address the evolving diverse needs of customers in the growing semiconductor market and continue to support a future shaped by creativity and innovation by applying our accumulated "Technology" and emphasizing "Tai-wa" as an industry leader in the field of film forming.

### Creating new technologies through synergy between film forming and treatment technologies

In line with the shift to 3D semiconductor devices, there is growing need for microfabrication and film forming geared to high-aspect-ratio devices. We are developing the cutting-edge film forming technology and equipment that offers uniformity and high productivity.

In addition to film forming, we are also a source of treatment technologies essential for low-temperature processing in which light, plasma, and other forms of energy are applied.

#### Batch Processing Systems



Batch Thermal Processing System  
for 200mm Wafers



High-productivity Batch  
Processing System  
AdvancedAce® II



High Quality & High Performance  
Thermal Processing System  
TSURUGI-C® 鋺®

#### Single Wafer Processing Systems



Single Wafer Plasma Nitridation/  
Oxidation System  
MARORA®



Single Wafer Annealing System  
TANDUO®



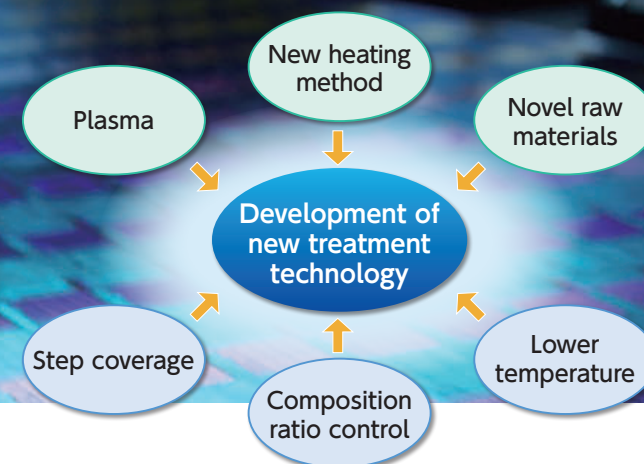
Dry Resist Strip System  
Lambda300



## OUR STORY / KOKUSAI ELECTRIC Group's Technology

### Proprietary film forming and treatment technologies spur semiconductor development globally

The Group is spurring semiconductor development globally by developing film forming technologies suitable for high-aspect-ratio devices that require advanced process technology and high-added-value treatment technology involving the application of light, plasma, and other forms of energy. We have also succeeded in forming high-quality thin films at low temperature by using a new heating method and novel raw materials. The ability to process at lower temperature has extended the range of thin film forming processes and is contributing to miniaturization of semiconductor devices. Eager to adopt new techniques, we will continue creating novel technologies.



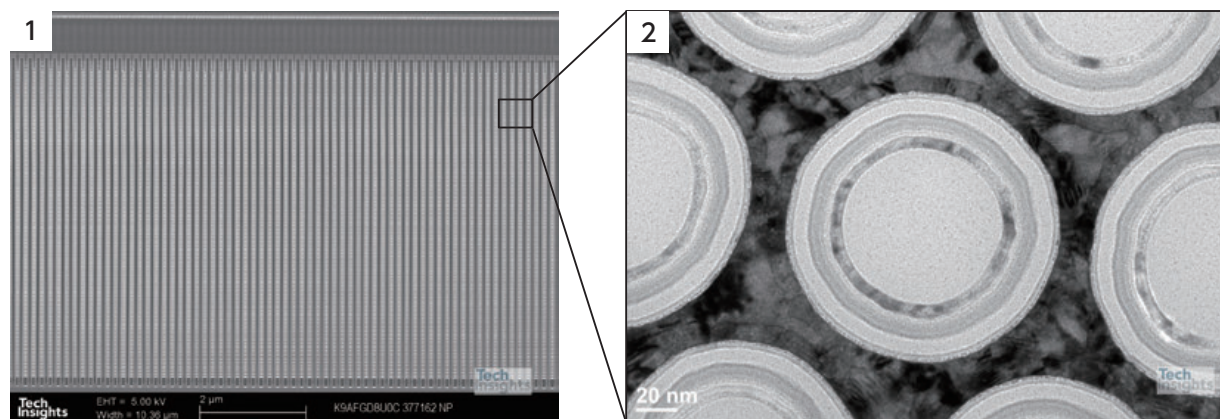
### Thin film forming through ALD (Atomic Layer Deposition)\* technology

The Group's ALD technology enables high level of lower-temperature processing and microfabrication required for next-generation semiconductor processing while maintaining outstanding productivity, benefitting a wide range of users and process applications.

ALD enables high-quality thin film forming with excellent step coverage and composition ratio control relative to the high aspect ratio and offers scalability for mass production.

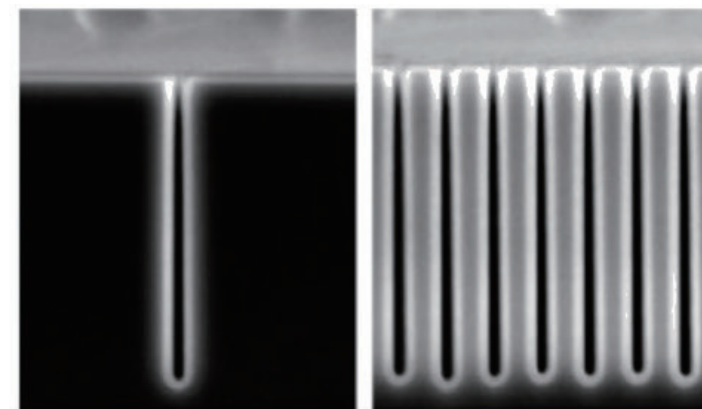
\*ALD (Atomic Layer Deposition): We refer to a technique for thin-film deposition at an atomic layer level involving a process of cyclical supply of multiple gases as "ALD".

#### 3D-NAND memory cell cross sections



Source: TechInsights (1, 2)

#### Step coverage



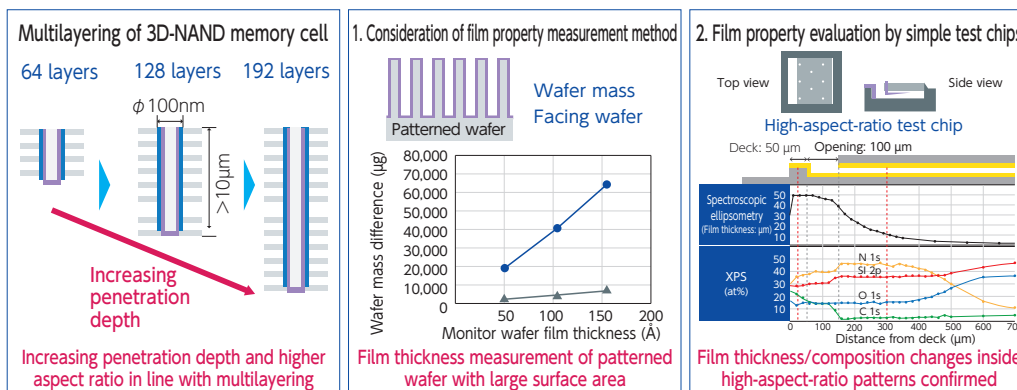
## OUR STORY / KOKUSAI ELECTRIC Group's Technology

### TOPICS: “Thin film measurement and analysis concept for semiconductor process development” presented at JSAP meeting

As one aspect of the initiatives to develop metrology (measurement and analysis), the Company presented its thin film measurement and analysis concept for semiconductor process development at the 69th Spring Meeting of The Japan Society of Applied Physics (JSAP).

In view of the technological trends of 3D-NAND memory cells toward “high aspect ratio” and “large surface area,” the Company highlighted issues in conventional film thickness measurement and film property analysis, and reported on the effectiveness of various measurement and analysis methods using patterned wafers with large surface area ( $\Phi 300\text{mm}$ ) and high-aspect-ratio patterns (simple test chips), citing cases of evaluation of the silicon nitride film process.

Such was the interest generated by this presentation in our initiatives as a manufacturer of semiconductor manufacturing equipment that we subsequently received many inquiries. We will continue developing metrology to support semiconductor process development.



#### VOICE

#### Yunosuke Sakai

Engineer,  
Component Development Department,  
System Development Division.

Film deposition uniformity is one of the factors indicative of the performance of semiconductor manufacturing equipment. Optimization of the conditions affecting wafers during film forming is necessary to achieve good uniformity, but it is difficult to directly monitor those conditions in a reaction chamber. Therefore, we use thermal fluid simulation to visualize those conditions and predict the film thickness distribution so that we can optimize the reaction chamber configuration according to the process conditions. Sophisticated capabilities for analyzing chemical reaction mechanisms are essential in prediction of nanoscale film thickness distribution. We will continue to enhance our capabilities through inputs from molecular simulations and basic experiments.



## OUR STORY / KOKUSAI ELECTRIC Group's Technology

## TOPICS: Development of treatment technologies using new methods

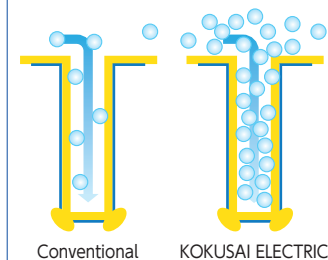
As semiconductor devices progress toward higher integration, the trend toward miniaturization of devices and multilayering is accelerating.

In parallel with greater multilayering, enhancement of device performance is pursued, and the constraints on processing in device formation are becoming more exacting.

Focusing on development of treatment technologies using new methods, we are developing processing methods to improve the quality of current films so that devices can achieve the desired performance even under more exacting processing conditions. For example, we developed a process that enables abundant supply of reactive species, realizing a processing method with sufficient step coverage even for 3D-NAND memory with penetration depth of over 200 layers. This method has been adopted by major memory manufacturers.

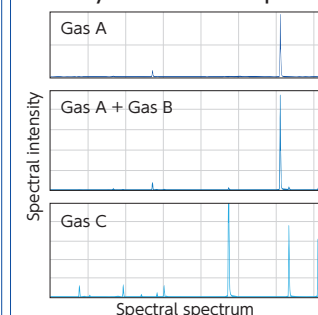
Furthermore, we are conducting monitoring and simulation of the types of reactive species of novel raw materials and associated phenomena, as well as analysis of reaction models, to develop more effective processing methods.

## 1. Abundant supply of reactive species



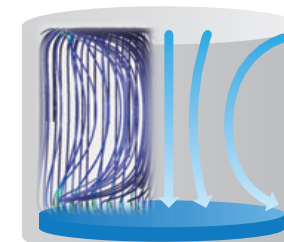
Suitable for increasing penetration depth

## 2. Analysis of reactive species



Control of specific reactive species

## 3. Simulation



Control of gas flow in chamber

Improved efficiency of supply of reactive species



## VOICE

## Hiroto Igawa

Process Engineer,  
Process Development Department III  
Process Development Division.

Requirements for treatment technology are becoming more challenging because of the trend toward lower temperature, miniaturization, and multilayering in recent years.

Treatment means adding value to a film by modifying the film. Although uniform modification inside trenches is required, the recent trend toward increasing penetration depth in line with greater multilayering is making this difficult to accomplish. Sufficient supply of reactive species is necessary for uniform modification inside deep trenches. Therefore, we optimize process conditions and improve the equipment configuration to ensure sufficient production and supply of reactive species. Through the construction of reaction models, verification of the models, and simulations, we intend to develop equipment that can accommodate greater multilayering in the future.

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### Editorial Policy

We believe it is important to promote stakeholders' understanding of the Group's initiatives for sustainable growth and we also want this report to serve as an opportunity for purposeful "Tai-wa". So, we selectively determine the contents and topics for inclusion and ensure the report remains readable and easy to understand, to deepen mutual understanding with – and encourage the engagement of – our stakeholders. We would appreciate it if you would complete the questionnaire after reading the report to help us enhance the report as a fruitful tool for further "Tai-wa".

<https://www.kokusai-electric.com/en/csr/report/process>

### Referenced Guidelines

- GRI (Global Reporting Initiative) Standards
- International Integrated Reporting Council (IIRC) Integrated Reporting Framework
- Ministry of Economy, Trade and Industry Guidance for Collaborative Value Creation (Guidance for Integrated Corporate Disclosure and Company-Investor Dialogue for Collaborative Value Creation)
- ISO (International Organization for Standardization) 26000
- Environmental Reporting Guidelines 2018

### Scope of This Report

Period: Fiscal 2021  
(from April 1, 2021 to March 31, 2022)  
(including some information from fiscal 2022)

Companies: The Company and its Group companies

Publication frequency: Once a year

Publication responsibility and contact:  
CSR Department, Business Strategy Division,  
KOKUSAI ELECTRIC CORPORATION

Published: February 2023

\*Tai-wa in the Corporate Slogan; and the product names, AdvancedAce, TSURUGI-C<sup>2</sup>, MARORA, TANDUO, VERTEX, ZESTONE, QUIXACE, and QUIXACE ULTIMATE; and the 鷗 logo are registered trademarks of KOKUSAI ELECTRIC CORPORATION.

## Communication Tools

Important information to facilitate understanding of the Group is compiled and included in this report. Information on the Group's business activities, detailed information not included in this report, and content that we want to continuously convey are posted on the Company's website. Please refer to the website and other communication tools for more details.



### Website

Corporate information as well as information on sustainability, products, and recruitment is posted on the Company's website.

KOKUSAI ELECTRIC <https://www.kokusai-electric.com/en/>



### Corporate Profile

We have published a Corporate Profile that provides an outline of the Group and posted this on our website. We will promptly update this if the content changes.

[https://www.kokusai-electric.com/en/assets/file/company/corporate\\_profile\\_en\\_202208.pdf](https://www.kokusai-electric.com/en/assets/file/company/corporate_profile_en_202208.pdf)



## Top Commitment

As a leader in the field of film forming in the semiconductor manufacturing process, we aim to expand our business by leveraging our technological advantages and create new value by deepening “Tai-wa” unique to the Group.

We greatly appreciate your understanding and support for the business activities of KOKUSAI ELECTRIC CORPORATION (“the Company”) and its Group companies.

The Group has renewed the Corporate Statement and established the KOKUSAI ELECTRIC Way to further deepen “Tai-wa” with stakeholders and express its determination to support the future through technology.

To realize this new Corporate Statement, the Group continues to make an all-out effort to support a future shaped by creativity and innovation under the corporate slogan “Technology & Tai-wa for Tomorrow.”

### Practicing “Technology” and “Tai-wa” for over 70 years

The Group is a specialized manufacturer of semiconductor manufacturing systems with a high share of global markets for batch deposition equipment\*1 and treatment equipment\*2, with strengths in film forming in the semiconductor manufacturing process and film property improvement. The Group's main customers are the world's foremost semiconductor manufacturers. We have been responding to customer needs through “Technology” and “Tai-wa” for more than 70 years, ever since the Company's foundation in 1949.

In recent years, demand has been growing for higher quality, higher performance, and higher productivity semiconductor manufacturing equipment, reflecting a shift of semiconductor devices to more complex three-dimensional structures. For us, technology is something that enables us to resolve highly challenging issues and to innovate through constant pursuit, refinement, and fusion across multiple fields. We value Tai-wa, which is a Japanese word meaning dialogue. “Tai-wa” is indispensable in order to identify the essential issues of our customers, sincerely engage with them, and conceive of the best possible solutions. “Tai-wa” has become an integral element of our DNA, the expression of our attitude to everything we do. We will continue to support tomorrow's society by responding to diverse needs through “Technology” and “Tai-wa”.

\*1 Batch deposition equipment: Equipment that performs film deposition by batch processing a large number of wafers

\*2 Treatment equipment: Equipment that improves film properties after deposition by single-wafer processing

### Fumiyuki Kanai

Representative Director,  
President and Chief  
Executive Officer



## Top Commitment

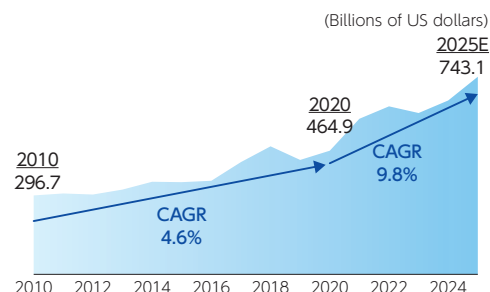
### Record results achieved on the back of rising demand for semiconductors worldwide

Despite ups and downs, the semiconductor device market is growing structurally and steadily. There is a significant difference from how it was a decade ago.

Traditionally, demand for semiconductor devices has been driven by consumer applications such as cellular phones and PCs, but in recent years, there has been a shift to demand from high-growth sectors, such as data centers, 5G, and AI. This trend was further accelerated by the progress of digitalization prompted by the COVID-19 pandemic. Although the market is currently in a demand adjustment phase, strategic investments in semiconductor device manufacturing are planned in many developed countries. The market growth is expected to further accelerate, at a CAGR of around 10% from 2020 through 2025.

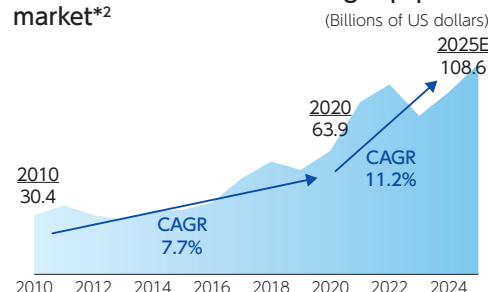
The semiconductor manufacturing equipment market is as attractive as, or even more attractive than, the semiconductor device market. Major device manufacturers are planning aggressive capital investments because realization of complex three-dimensional structures of semiconductor devices requires higher-value-added, higher-quality, and higher-performance semiconductor manufacturing equipment. The semiconductor manufacturing equipment market is expected to grow at an average annual rate of about 12% from 2020 through 2025, faster than the semiconductor device market.

#### Semiconductor device market\*1



\*1 Source: VLSI Research powered by TechnoInsights "Worldwide Semiconductor History and Forecast" 2022 (March)

#### Semiconductor manufacturing equipment market\*2



\*2 Source: VLSI Research powered by TechnoInsights "IC Manufacturing Equipment Market History and Forecast" 2022 (January)

In fiscal 2021, in addition to the continuing impact of the COVID-19 pandemic due to the outbreak of mutant strains, such as the Delta and Omicron variants, the Russia-Ukraine conflict triggered soaring oil prices and commodity prices, while human rights issues escalated in various countries and regions, and supply chain disruptions became evident. Despite this uncertain outlook, the Group's earnings for the fiscal year ended March 31, 2022 were gratifying, with revenue of ¥245.4 billion, up 37.8% year on year, and operating profit of ¥70.7 billion, up 17.8% year on year, both record highs. We once again wish to express our appreciation to all stakeholders.

### Enhance our presence with batch ALD technology

In line with the shift to three-dimensional structures and miniaturization of devices, device structures have in recent years become deeper, narrower, and more complex, and the surface area that needs to be deposited has increased, requiring more difficult, high-quality film forming. Therefore, the need for ALD\* technology has greatly expanded. ALD enables uniform deposition of high-quality films with good step coverage.

On the other hand, the ALD technology requires sequential gas charging and discharging cycles, and thus deposition is time consuming and productivity is an issue. The high productivity of batch deposition technology, which allows simultaneous deposition of multiple wafers, is a very effective solution to this issue associated with ALD technology. Our batch ALD technology, which is the combination of batch deposition technology with ALD technology, is a logical solution to achieve both highly difficult film forming and high productivity. This batch ALD technology is a very complex technology and can only be achieved by applying numerous state-of-the-art technologies developed and mastered over the years. The Group has accumulated patents and expertise throughout its long history and intends to further extend its lead, and will definitely not rest on its laurels despite the current gratifying market share.

\*ALD (Atomic Layer Deposition): We refer to a technique for thin-film deposition at an atomic layer level involving a process of cyclical supply of multiple gases as "ALD".

#### Complementary relationship between batch deposition technology and ALD technology

Logical solution to achieve both highly difficult film forming and high productivity.

Batch deposition technology  
High productivity



ALD technology  
Time-consuming highly difficult film forming

#### Batch ALD technology capable of realizing both highly difficult film forming and high productivity

##### Batch deposition equipment

High Quality & High Performance  
Thermal Processing System  
TSURUGI-C<sup>2</sup>® 颯®



- Film deposition performance suitable for next-generation devices and high productivity
- [Compatible with the latest batch ALD technology](#)

High-productivity Batch  
Processing System  
AdvancedAce® II



- High-quality film deposition performance and high productivity
- [Compatible with both batch ALD technology and batch CVD technology](#)



## Top Commitment

### Lead the industry with vigorous business reforms

In order to continue to anticipate and appropriately respond to the rapidly changing business environment and increasingly sophisticated customer needs, it is essential to achieve vigorous business reforms without being bound by conventional concepts. We will continue to lead the industry by always exploring new ways to collaborate with stakeholders from new perspectives and creating new value through the Group's unique "Technology" and "Tai-wa".

Most recently, we are promoting the following initiatives:

- Acceleration of the pace of development of new technologies and products
- Expansion of market share and maximization of profit by acquiring new POR\*
- Construction of a new factory and realization of the largest production capacity ever by introducing a new production system
- Expansion of the service business by introducing new ideas
- Strengthening of the development environment by using data science and creation of high-value-added products
- Promotion of business reform through DX-related investments
- New initiatives for creation of new businesses

\*POR: Process of Record (Approval at the customer's production line to adopt the Company's products)

### Promote sustainability management to achieve the SDGs

At the Group, we believe it is our corporate social responsibility to earn the trust and meet the expectations of society through our business activities. By pursuing corporate value through both business activities and ESG initiatives (resolution of environmental and social issues and strengthening of governance), we aim to contribute to achievement of the Social Development Goals (SDGs) while concurrently seeking to realize sustainable development of the Group.

In promoting sustainability management, having established the Sustainability Committee under the supervision of the Board of Directors to broadly discuss the activities of the entire Group, we have strengthened the system to enable the Board of Directors to be actively involved in promotion and management of sustainability management. Moreover, we have identified anew the key issues to be addressed from both internal and external perspectives based on in-depth analysis of risks and opportunities. We are accelerating activi-



Contribution to society  
through creativity and  
innovation



Creation of a sustainable  
society and conservation  
of the global environment



Human resources  
management as a source  
of innovation



Strengthening of the  
governance system to realize  
sustainability management



Respect and  
consideration of  
human rights

ties to resolve these issues, by identifying five key items indicated below as materiality.

Based on these items of materiality, we have specified priority themes and activity items as well as key performance indicators (KPIs) as quantitative indicators. While actively promoting investment, we are committed to contributing to the achievement of the SDGs by 2030. At the same time, we will pass on the Group's unique Technology and "Tai-wa" far into the future, continually endeavoring to enhance our brand power and ability to collaborate with stakeholders.

In June 2022, to indicate KOKUSAI ELECTRIC's endorsement of the Ten Principles concerning the protection of human rights, the elimination of unfair labor practices, response to environmental problems, and the prevention of corruption advocated by the United Nations Global Compact, an international initiative, I signed the UN Global Compact. Mindful that participation in the UN Global Compact is an opportunity to further demonstrate responsible leadership and act as a good member of society, we are seizing the initiative as we work toward realization of a sustainable society.

➔ For details, refer to KOKUSAI ELECTRIC Group's Sustainability Management on P.17-20.

### Contribute to the world through business, always aware of our corporate social responsibility

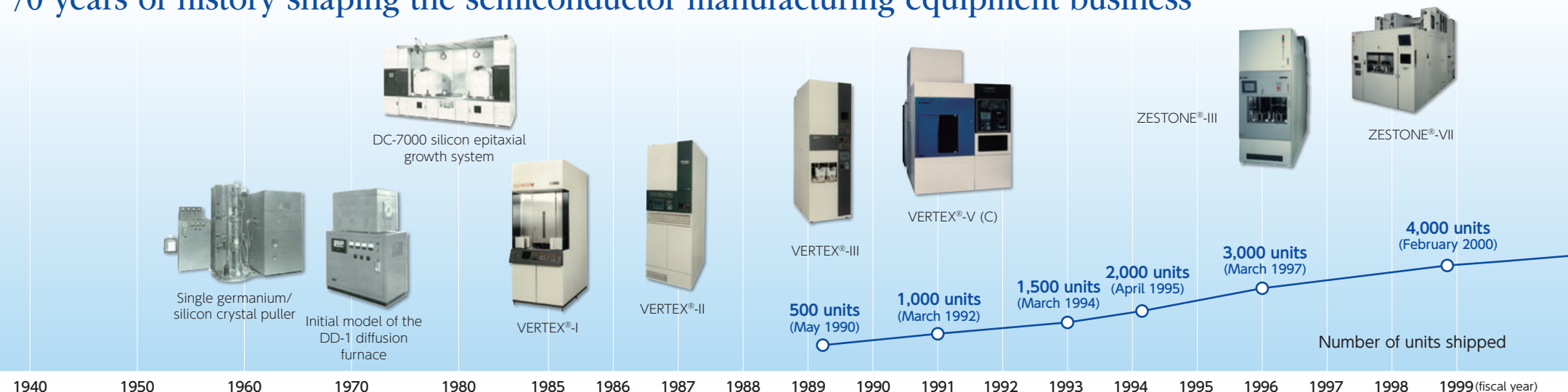
It is our mission to provide the world with semiconductor manufacturing equipment that responds to the accelerating trend toward higher density and higher performance of semiconductor devices. But at the same time, fulfilling this mission is a great challenge. There are technological issues, issues concerning energy saving, related to electricity, water and deposition gases, issues concerning stable procurement throughout the supply chain, and so on. Naturally,

ensuring health and safety of our stakeholders and protection of human rights are our top priorities. Despite the uncertain outlook for society as a whole, the Group will continue to embrace new challenges, always pursuing the newly established KOKUSAI ELECTRIC Way and inspired by the corporate slogan, "Technology & Tai-wa for Tomorrow." We look forward to your further support and understanding.



## History of Value Creation

### 70 years of history shaping the semiconductor manufacturing equipment business



#### -1970s

##### 1940-1950

- Focused on research of industrial equipment using radio frequency (1947)
- Kokusai Electric Co., Ltd. established (1949)

##### 1951-1960

- Began development of semiconductor manufacturing equipment
- Developed single germanium/silicon crystal puller

##### 1961-1970

- Began research on impurity diffusion in semiconductor manufacturing equipment
- Developed the initial model of diffusion furnace (DD-1)
- Sold the site of Komae Works to the Tokyo Metropolitan Government and established Hamura Works (Tokyo)

##### 1971-1979

- Developed CVD system

#### 1980s

##### 1980-1989

- Developed 150 mm wafer-ready silicon epitaxial growth system (DC-7000)
- Developed vertical CVD system (VERTEX®-I)
- Implemented a plan to double production output
- Implemented the second plan to double production output
- Developed 150 mm wafer-ready vertical CVD system (VERTEX®-II)
- Relocated the production site from Hamura Works to Toyama Works (Toyama Prefecture) (1989)
- Developed 200 mm wafer-ready vertical CVD system (VERTEX®-III)
- Developed load-lock system (VERTEX®-V (C)) that suppresses natural oxide film formation

#### 1990s

##### 1990-1999

- Developed 300 mm wafer-ready vertical diffusion/CVD system (ZESTONE®-III)
- Developed 300 mm wafer-ready single wafer CVD system (ZESTONE®-VII)
- Obtained ISO 9001 certification (1995)
- Obtained ISO 14001 certification (1996)

Social  
situation

Postwar  
reconstruction

High economic  
growth

Boom in home  
appliances and car  
ownership

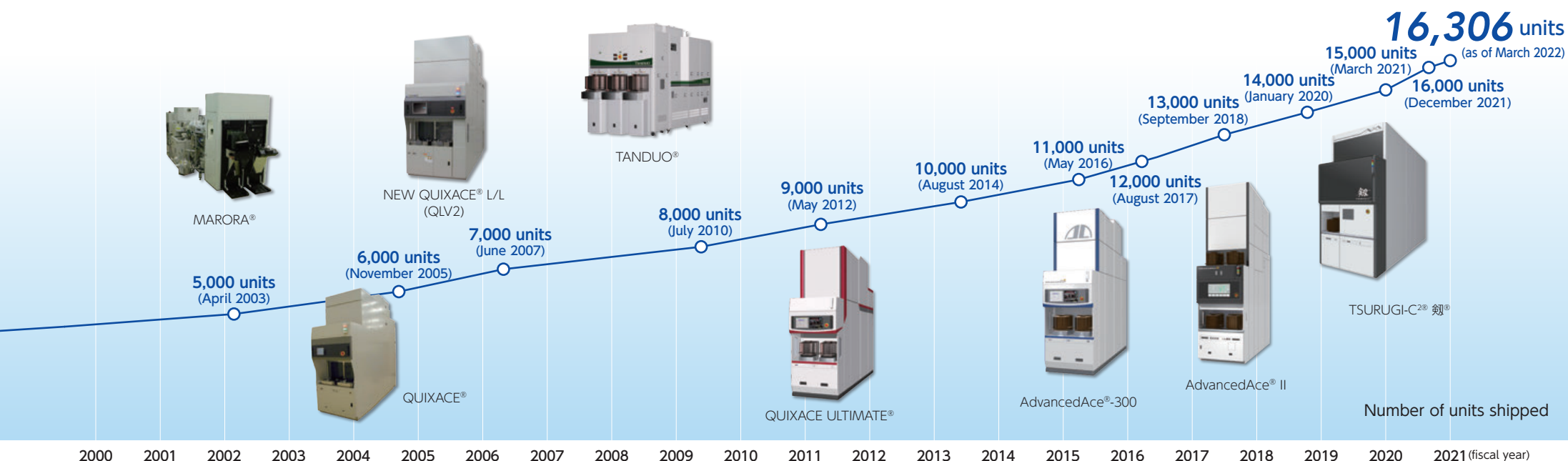
Economic bubble

IT bubble

Globalization



## History of Value Creation



### 2000s

#### 2000-2009

- The company name changed to Hitachi Kokusai Electric Inc.
- Developed single wafer plasma nitridation system (MARORA®) suitable for next-generation process
- Developed QUIXACE® incorporating QTAT (quick turnaround time) technology
- Developed NEW QUIXACE® L/L (QLV2)
- A new fab constructed at Toyama Works
- Developed high-productivity ashing/annealing system (TANDUO®)
- Became a consolidated subsidiary of Hitachi, Ltd.
- Obtained OHSAS 18001 certification (Toyama Works) (2001)

### 2010s

#### 2010-2019

- Developed QUIXACE ULTIMATE®
- Developed AdvancedAce®-300
- Developed AdvancedAce® II
- Developed TSURUGI-C²® 颯®
- The company name changed to KOKUSAI ELECTRIC CORPORATION following spinoff of the film forming process solutions business (2018)

### 2020s-

#### 2020-

- Obtained ISO 45001 certification (Toyama Technology & Manufacturing Center) (2021)

Diffusion of  
digital devices

Advent of  
smartphone

Paris Agreement adopted  
SDGs adopted

Advent of a society  
emphasizing  
sustainability

TCFD  
recommendations

Spread of  
COVID-19

## At a Glance

### Product lines with leading global market shares

#### Batch deposition systems



High Quality & High Performance  
Thermal Processing System  
TSURUGI-C<sup>2</sup> 剣®



High-productivity Batch  
Processing System  
AdvancedAce® II

#### Treatment systems



Single Wafer Plasma Nitridation/  
Oxidation System  
MARORA®

As an equipment manufacturer specializing in the deposition process of the front-end semiconductor manufacturing process, the Group has developed batch deposition systems and treatment systems that have high market shares.

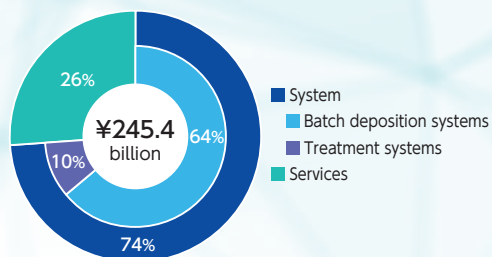
\*1 Systems in the "Tube CVD" segment of Gartner's semiconductor manufacturing equipment (front-end process) classification are defined as "batch deposition systems."

\*2 Systems in the "RTP and Oxidation/Diffusion" segment of Gartner's semiconductor manufacturing equipment (front-end process) classification are defined as "treatment systems."

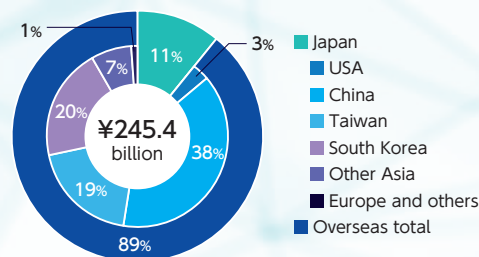
Source: "Market Share: Semiconductor Wafer Fab Equipment, Worldwide, 2021, Gartner, April 2022"

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#### Revenues by Business (Consolidated)\*3



#### Revenues by Region (Consolidated)\*3

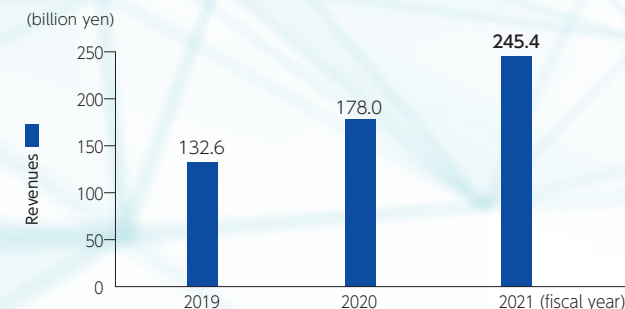


#### Revenues (Consolidated)

**¥245.4** billion

#### Operating Profit (Consolidated)

**¥70.7** billion



#### Overview

During the fiscal year under review, the global economy was affected not only by the continuing impact of the COVID-19 pandemic, but the outlook was made even more uncertain by the protracted Russo-Ukraine conflict and the financial instability it triggered, notably soaring crude oil prices, and other factors. However, the semiconductor device market and the semiconductor manufacturing equipment market relevant to the Group continued to grow, buoyed by rising demand for smartphones and PC-related products. Moreover, demand associated with high-growth sectors, including data centers, 5G high-speed communication standards, and AI, increased.

\*3 The figures above are for the fiscal year ended March 31, 2022. Calculations are based on customers' locations.



## At a Glance

### Group network

Japan

2 companies

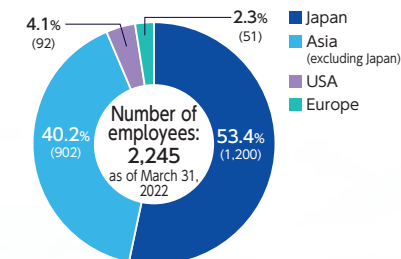
Overseas

5 companies

Global Human Resources (Consolidated)\*

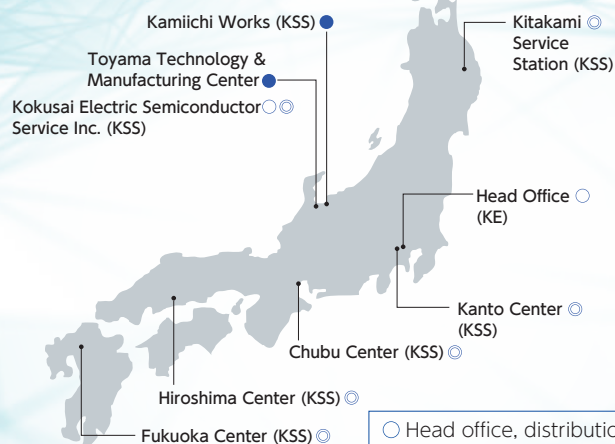
46.5%

Number and Percentage of Personnel  
by Region (Consolidated)\*

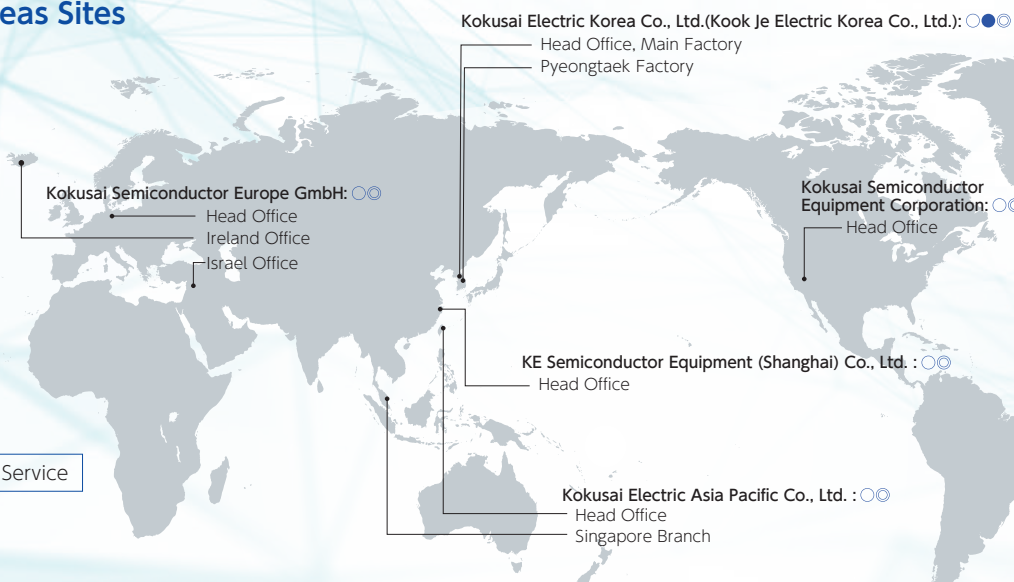


\*The number of employees of the Company as of March 31, 2022 was 2,245, of which employees working overseas accounted for 46.5%.

#### Sites in Japan



#### Overseas Sites



### Main Centers for Development, Design, and Production

#### Toyama Technology & Manufacturing Center

Located in Yatsuo-machi, Toyama, with a view of the Tateyama mountain range, this factory has special-purpose clean rooms where semiconductor manufacturing equipment for next-generation processes is developed, designed, and produced to meet the demanding needs of major users worldwide.



#### Kamiichi Works of Kokusai Electric Semiconductor Service Inc.

Located amid a rich natural environment in Toyama Prefecture's Kamiichi Town at the foot of Mt. Tsurugidake in Japan's Northern Alps, the factory develops, designs, and produces ultrasonic cleaning machines and resistivity measurement systems. It also produces controllers for semiconductor manufacturing equipment. These products are supplied to users across the world.



#### Cheonan-si Head Office and Main Factory of Kokusai Electric Korea Co., Ltd.

Located in Cheonan-si, Chungnam, about 100 km south of Seoul, the capital of South Korea, Kokusai Electric Korea Co., Ltd. designs, produces, and upgrades semiconductor manufacturing systems, supplying products mainly to users in South Korea.



#### Pyeongtaek Factory of Kokusai Electric Korea Co., Ltd.

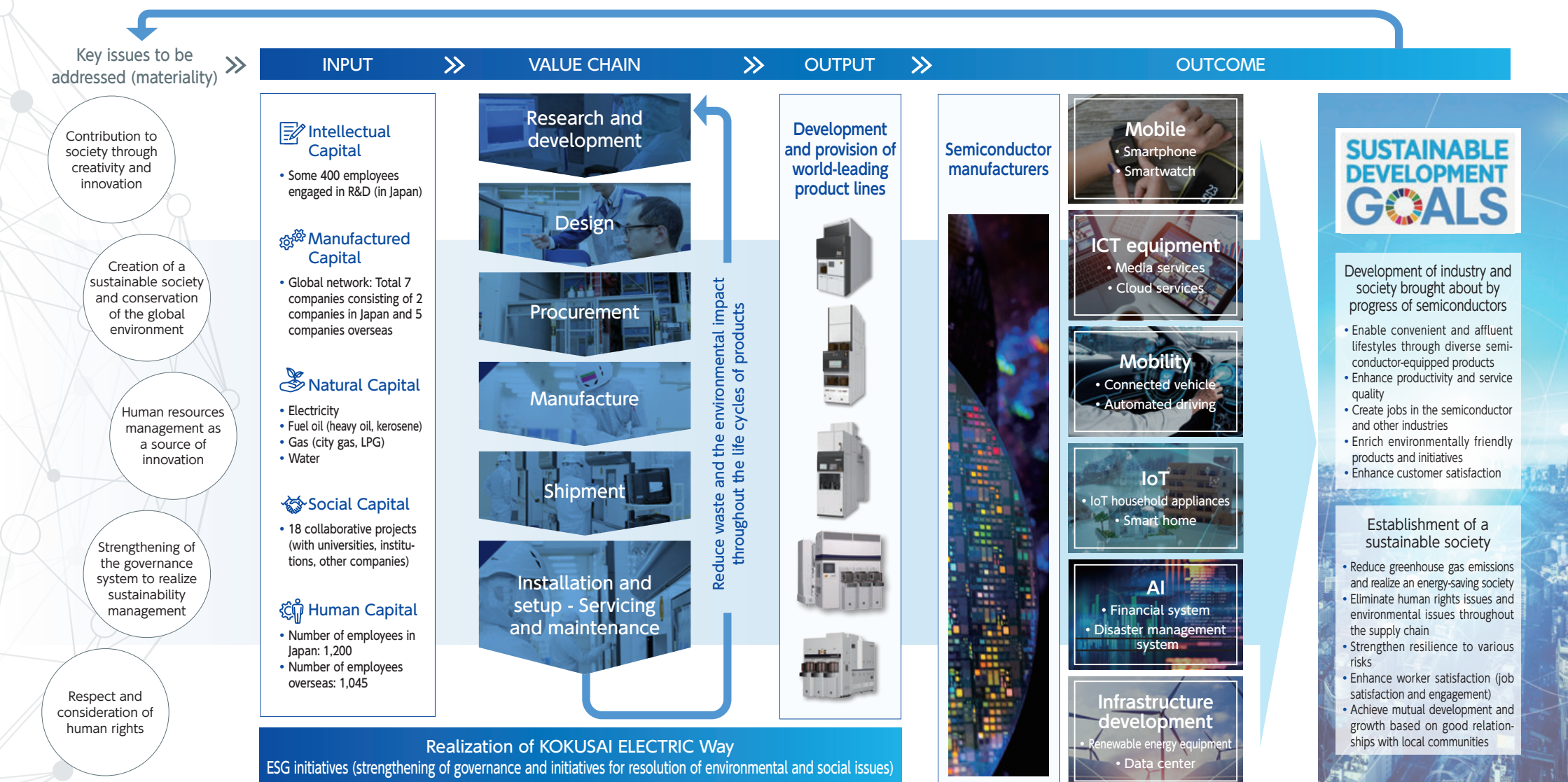
Pyeongtaek in Gyeonggi Province is located to the south of Seoul, the capital of South Korea. As the service base for South Korean users, and also developing the evaluation of semiconductor manufacturing equipment, it meets the needs for advanced technologies and products utilizing local production for local consumption.



## Value Creation Process

### Value creation through business

Mindful of the key issues to be addressed (materiality) as the starting point, the Group is committed to contributing to development of industry and society and establishment of a sustainable society through the semiconductor manufacturing equipment business and ESG initiatives (resolution of environmental and social issues and strengthening of governance), making effective use of the Group's management capital. In order to realize this value creation process, we are endeavoring to offer high-quality, high-performance products and high-value-added services.

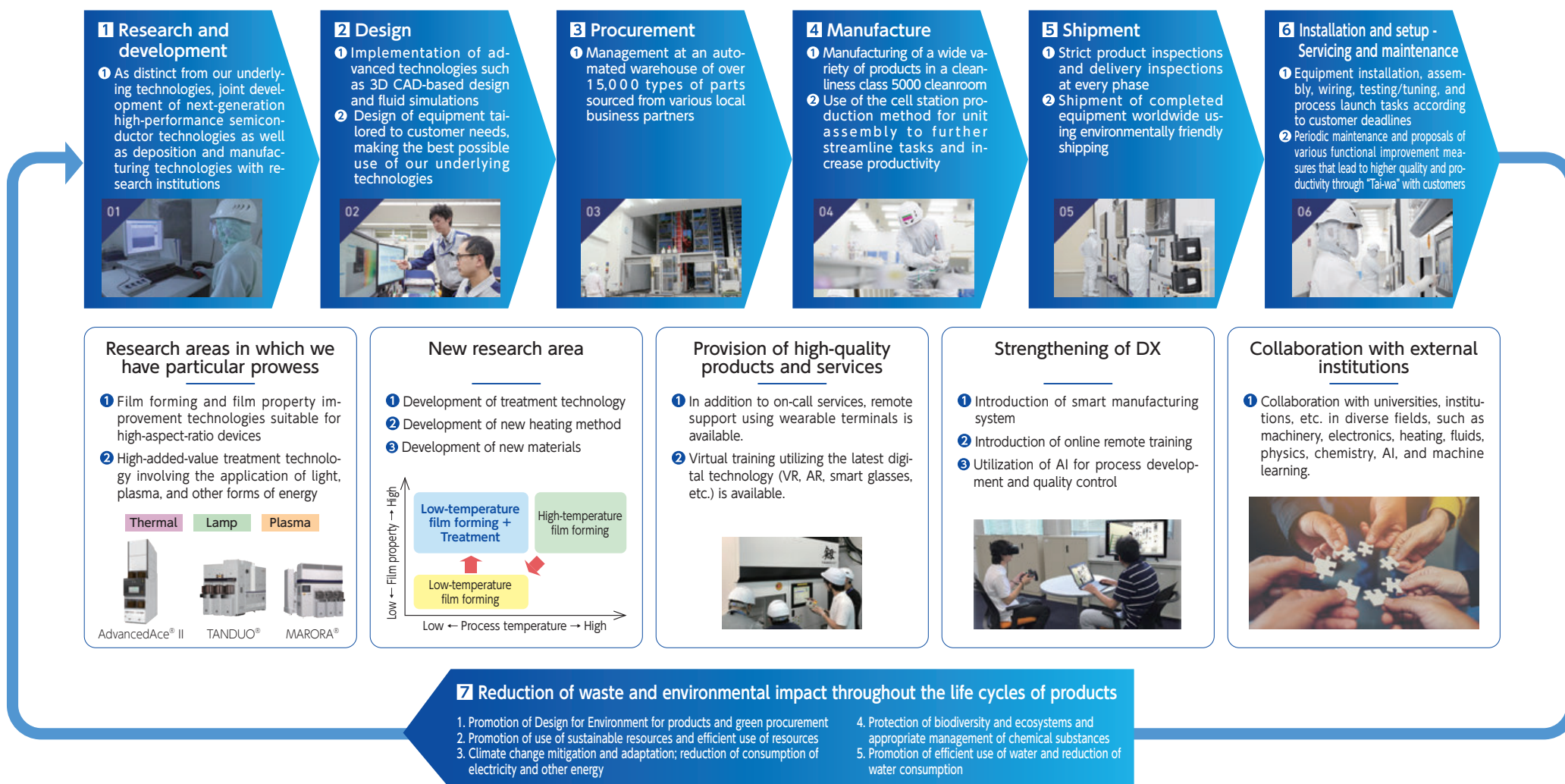




## Value Chain

### Robust value chain supporting value creation

Semiconductors have circuits formed by depositing multiple layers of film on the surface of a silicon substrate called a wafer. This process of forming thin films is called a deposition process and is the most important process in semiconductor fabrication. Leveraging its world-class film forming technologies, the Company produces semiconductor manufacturing equipment that enables nanometer-scale microfabrication approaching the physical limits, to meet the needs of the world's foremost semiconductor manufacturers. Our value chain enables the ever-higher functionality and performance of semiconductors.



## KOKUSAI ELECTRIC Group's Sustainability Management

### The Group's approach to CSR and sustainability management

At the KOKUSAI ELECTRIC Group, we believe it is our corporate social responsibility to earn the trust and meet the expectations of society through our business activities.

Based on a full awareness of this social responsibility, within the framework of sustainability management, by pursuing economic value as well as environmental and social value through both business activities and ESG initiatives (resolution of environmental and social issues and strengthening of governance), we aim to contribute to achievement of the SDGs while concurrently seeking to realize a safe, comfortable, vibrant, and sustainable society as well as sustainable development of the Group.

In promoting sustainability management, the Group is strengthening the foundation of its activities by reviewing the Corporate Statement, identifying materiality (key issues), establishing a dedicated committee, and participating in international initiatives.

We disclose these activities in this report and on our website with a view to broadly engaging in "Tai-wa" about the Group's sustainability management with stakeholders.

#### Contribution to achievement of the SDGs and realization of a sustainable society



##### Corporate Social Responsibility (CSR)

Earn the trust and meet the expectations of society through business activities

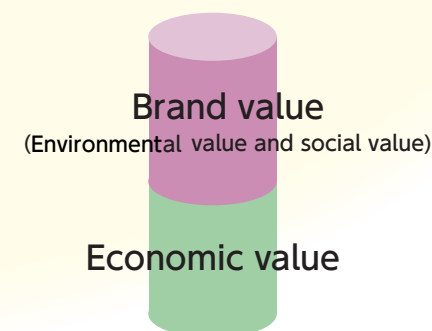
#### Sustainable development of the Group

Technology & Tai-wa for Tomorrow



Enhancement of corporate value

#### Pursue enhancement of the Group's corporate value





## KOKUSAI ELECTRIC Group's Sustainability Management

## Revision of the Corporate Statement

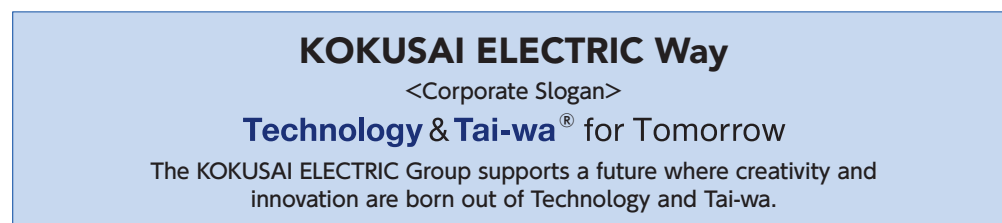
The Group has renewed the Corporate Statement and established the KOKUSAI ELECTRIC Way to further deepen "Tai-wa" with stakeholders and express its determination to support the future through technology, as well as to enhance employees' engagement.

In formulating the new Corporate Statement, a working group of employees drawn from each division was established to review the significance of the Group for society, the mission we should fulfill, the values and strengths we cherish, and the vision we aim to achieve in the future, and had many discussions with senior management.

We are working to enhance employee awareness so that everyone at the Group can deepen their understanding of the contents of the KOKUSAI ELECTRIC Way and embody them in their daily actions.

Based on the KOKUSAI ELECTRIC Way and our medium- to long-term business strategies formulated in view of materiality (key issues), we establish the medium-term management plan and set KPIs to manage progress in line with the plan. We also share our priority measures and approach across the Group based on our annual business management policy.

### New Corporate Philosophy and Policy



\*"Tai-wa" in the corporate slogan comes from the Japanese word 対話 meaning dialogue. Rather than translating this term into English, we write it as "Tai-wa" and use it as a watchword for a flourishing corporate culture to be cherished far into the future by everyone in the Group, transcending differences of language and background.

## Identification of Materiality

The Group has identified as materiality those priority issues that are to be addressed in order for the Group to contribute to achievement of the SDGs and achieve sustainable development. We extracted and organized materiality candidates based on international requirements and the Group's sustainability management issues, and shortlisted them by identifying items with a high degree of importance to both stakeholders and the Group based on matrix evaluation. As regards those items having a high degree of importance, the Board of Directors confirmed their consistency with the Company's initiatives and strategies.

Following the identification of materiality comprising five items, we have specified priority themes and activity items and are managing their progress by setting KPIs. Progress statuses are monitored by the Sustainability Committee and the Board of Directors.

We will vigorously disclose the materiality identification process and the situation of internal promotion activities and promote "Tai-wa" with our stakeholders.

### Identification process (1): Extract and organize materiality candidates

#### • Organize external requirements

We extract and organize social issues and requirements that may have an impact on the Group's business activities based on the recommendations of international ESG information disclosure guidelines, the evaluation items of ESG management evaluation bodies, and the advocacy of the SDGs.

#### • Organize the Group's sustainability management issues

Based on the Group's business environment, earnings opportunities, and various assumed risks, we extract and organize issues necessary for strengthening sustainability management.

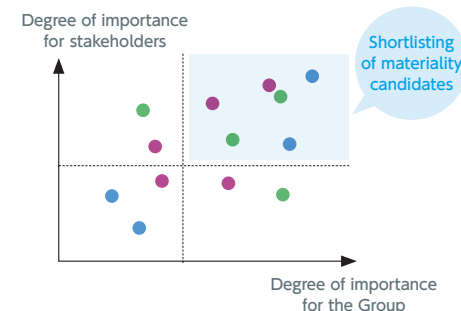
### Identification process (2): Evaluate the degree of importance of materiality candidates (prioritization)

• For the materiality candidates extracted and organized in the identification process (1), we score the degree of importance from both subjective and objective evaluations, and prioritize them using matrix evaluation, shortlisting the items with high degree of importance as materiality of the Group.






### Identification process (3): Confirm validity and identify materiality

• For the key items shortlisted in the identification process (2), the Sustainability Committee and the Board of Directors confirm the consistency with the Company's initiatives and strategies and identify materiality.

### Matrix evaluation (image)



## KOKUSAI ELECTRIC's Five Key Issues (Materiality)

Materiality	Priority themes	Activity items
 Contribution to society through creativity and innovation	Creation of new technologies and new products	Development of advanced underlying technologies and promotion of joint development with external institutions
	Enhancement of customer satisfaction	Provision of products, technologies, and services attuned to the VOC *VOC: Voice Of Customer
	Enhancement of economic performance	Improvement of business results, investment, etc. and confirmation of the return on investment
 Creation of a sustainable society and conservation of the global environment	Reduction of environmental impact	Reduction of greenhouse gas emissions
		Thorough management of energy
		Thorough management of waste and hazardous substances
		Thorough management of water and wastewater
 Human resources management as a source of innovation	Contribution to the environment through technology and products	Development of environmentally friendly products
	Promotion of sustainable procurement	Strengthening of supply chain management
	Respect for diversity of human assets	Promotion of diversity & inclusion
	Development of human resources who learn on their own, think on their own and act on their own	Development of global human resources and securing of excellent human resources
 Strengthening of the governance system to realize sustainability management	Maintenance and enhancement of health and safety	Strengthening of occupational health and safety management
	Strengthening of governance	Strengthening of corporate governance
		Thorough compliance
	Thorough management of major business risks	Strengthening of SCR*/CR risk countermeasures and BCP *SCR: Super Clean Room
 Respect and consideration of human rights	Ensuring of management transparency	Strengthening of information security risk countermeasures and BCP
		Timely and appropriate disclosure to internal and external parties
		Promotion of the understanding and awareness of employees about human rights



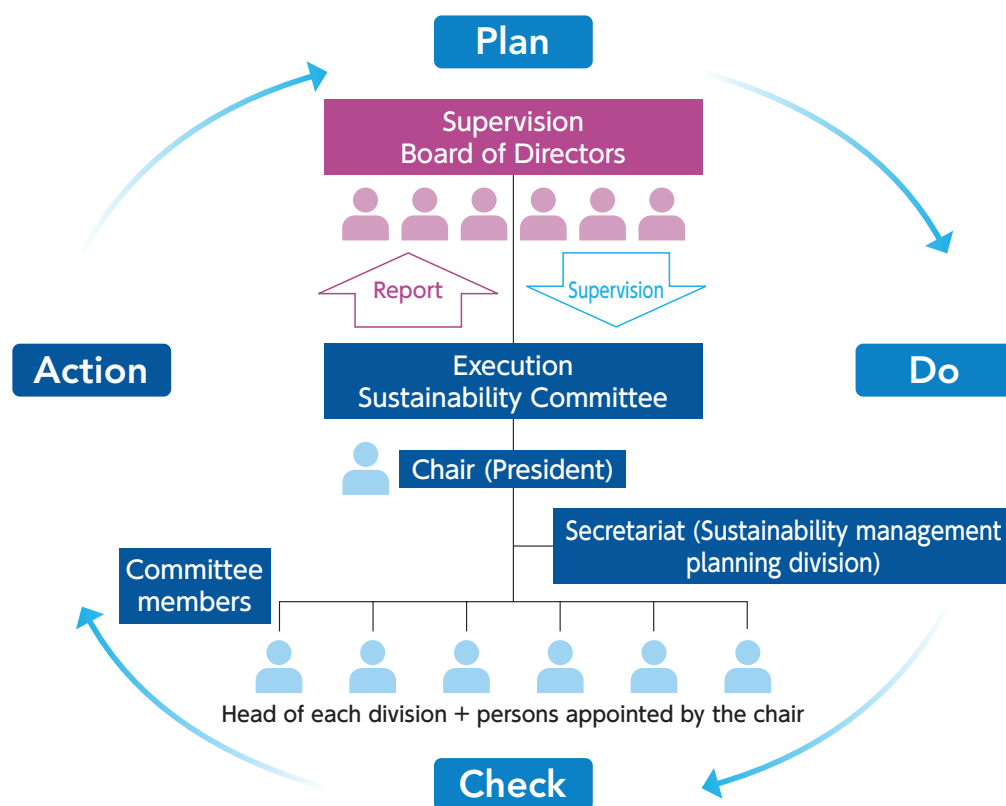
## KOKUSAI ELECTRIC Group's Sustainability Management

## Sustainability Committee

We have established and operate the Sustainability Committee, chaired by the President, as a dedicated meeting body to drive our sustainability activities.

The Sustainability Committee is composed of members with the expertise necessary to address various social and business issues. Matters to be deliberated on by the committee are determined in consideration of materiality, external requirements, opinions of external consultants, etc. The statuses of sustainability activities led by the committee are regularly reported to the Board of Directors and communicated to the internal parties.

We disclose our sustainability activities in this report and on our website with a view to broadly engaging in “Tai-wa” about our business management with stakeholders.



## Participation in International Initiatives

We participate in the following international initiatives in order to keep abreast of social trends, identify our own issues, and properly promote measures for resolution of the issues and monitoring of their implementation, and are promoting sustainability management.

### United Nations Global Compact (UNGC)

We became a signatory to the UNGC\* in June 2022 and are promoting activities in accordance with the Ten Principles concerning the protection of human rights, the elimination of unfair labor practices, response to environmental problems, and the prevention of corruption.

\*United Nations Global Compact

In the UNGC, which is the world's largest corporate sustainability initiative, the United Nations and the private sector (companies and organizations) collaborate to build a sound global society. It is a voluntary initiative by companies and organizations, acting as good members of society, to achieve sustainable growth by demonstrating responsible leadership.



### Task Force on Climate-related Financial Disclosures (TCFD)

In August 2021, we announced our endorsement of the TCFD\* and are promoting initiatives in line with TCFD recommendations on disclosures of risks and opportunities related to climate change.

\*Task Force on Climate-related Financial Disclosures

Framework for promoting disclosure of information on the impacts of climate change on the operations of companies and institutions and their actions to address these impacts



## Registration for the TOYAMA SDGs PROJECT

The “TOYAMA SDGs PROJECT” is Toyama Prefecture’s approach to promote initiatives for the SDGs. Participating companies and organizations located in Toyama Prefecture declare their engagement with the SDGs and disseminate information on their initiatives for the SDGs by posting the information on a dedicated website of Toyama Prefecture. The objective is to motivate other companies and organizations across Toyama to engage in the SDGs and facilitate collaboration between companies and organizations and the prefectural and municipal governments. The Group has several sites in Toyama Prefecture. As a group with a presence in the prefecture, the registration for the TOYAMA SDGs PROJECT and dissemination of information have helped us strengthen our awareness of our social responsibility and leadership role and we will vigorously engage in various activities.

TOYAMA SDGs PROJECT (in Japanese) |  
<https://www.sdgs-toyama.jp/>



富山県SDGs宣言  
TOYAMA SDGs PROJECT

## Creation of a Sustainable Society and Conservation of the Global Environment

### Promoting initiatives to address environmental and social issues throughout the supply chain

The greenhouse gases generated by the Group's business activities, as well as the energy and resources the Group uses, may have a serious impact on the global environment. We have a responsibility to be more environmentally conscious in order to pass on a beautiful natural environment to future generations.

We are promoting creation of a sustainable society and conservation of the global environment by maintaining and improving our environmental management systems (ISO 14001) in accordance with the Action Guidelines for Environmental Conservation. The Group's initiatives for the environment are also disclosed on our website.

[Initiatives for the environment | https://www.kokusai-electric.com/en/csr](https://www.kokusai-electric.com/en/csr)

### Eco-mindset and Global Environmental Management

#### Action Guidelines for Environmental Conservation

In accordance with the KOKUSAI ELECTRIC Way, the KOKUSAI ELECTRIC Group has established action guidelines for tackling environmental conservation in business activities. In order to ensure the aims of the guidelines are achieved, we will continue following and making improvements to them through the ISO 14001 environmental management system.

#### Purpose

In order to realize an environmentally harmonious and sustainable society through the provision of products and services, the KOKUSAI ELECTRIC Group is committed to meeting its social responsibilities by promoting globally applicable Monozukuri aimed at reducing the environmental impacts of products throughout their entire life cycles, thereby ensuring global environmental conservation.

#### Action Guidelines

- 1 Recognizing environmental conservation to be an important issue for all of humanity, we will fulfill our social responsibilities by working to realize an environmentally harmonious and sustainable society as a top business priority.
- 2 We will accurately identify needs related to preventing global warming, recycling and reusing resources, and preserving ecosystems, and strive to contribute to society by developing sophisticated and highly reliable technology and products that meet those needs.
- 3 The executive officer responsible for environmental conservation will drive forward appropriate environmental conservation activities.  
Through the divisions they oversee, they will facilitate environmental conservation activities through measures such as establishing relevant rules and setting targets to reduce environmental impacts, confirm that said activities are being properly carried out, and make every effort to maintain and improve them.
- 4 We will operate a global manufacturing system that aims to identify and reduce environmental impacts at every stage — from product R&D and design to production, distribution, sales, usage, and disposal.
- 5 We will research and review the impact our manufacturing activities have on the environment, and implement technology and materials with properties that contribute greatly to protecting the environment by mitigating environmental impacts through saving energy, conserving resources, recycling, managing chemical substances, considering ecosystems, and other measures.
- 6 We will work to protect the environment by not only complying with international environmental regulations and the environmental regulations of individual countries and municipalities, but also by formulating our own standards as needed.
- 7 When carrying out global manufacturing activities, we will strive to implement measures that consider the impact on each region's environment and meet the needs of the community.
- 8 We will educate employees on wide-ranging environmental conservation activities and compliance with environmental laws, raise their environmental awareness, foster their interest in society at large, and encourage them to translate that into action.
- 9 We will assess the risk of environmental problems and work to prevent them. In the event an environmental problem does occur, we will take appropriate measures to minimize its impact on the environment.
- 10 We will make every effort to disclose information and proactively communicate with stakeholders about our environmental conservation activities, and work to enhance mutual understanding and cooperation.



## Creation of a Sustainable Society and Conservation of the Global Environment

## ISO 14001 Certification

The Company has established an environmental management system based on the international standard ISO 14001 to contribute to mitigating environmental impacts and protecting the environment. Through this system, we have put in place an organizational structure to facilitate environmental activities, provide environmental education, set objectives and targets for specific activities, and work to achieve them, and make continuous improvements to activities by following a PDCA cycle.

Specific information on ISO certification of the Group's individual sites in Japan can be found on the website ("Search for certified organizations") of the Japan Accreditation Board (JAB).

Japan Accreditation Board | <https://www.jab.or.jp/en/>

Certifying organization: Japan Quality Assurance Organization (JQA)

Management Systems Sector

Registration number of the certifying organization: JQA-EM7390



## Promotion and Evaluation of Environmental Management

### Promotion of Environmental Management

We have established an environmental management system in accordance with the KOKUSAI ELECTRIC Action Guidelines for Environmental Conservation, and work to cultivate an "eco-mindset."

#### • Environmental Management System

The environmental supervisor sets the environmental policies, and the environmental committee composed of the environmental supervisor, environmental manager, and the heads of each division promotes environmental conservation activities across the Group.

Environmental activities comprise three categories, consisting mainly of the following activities.

#### Eco-management

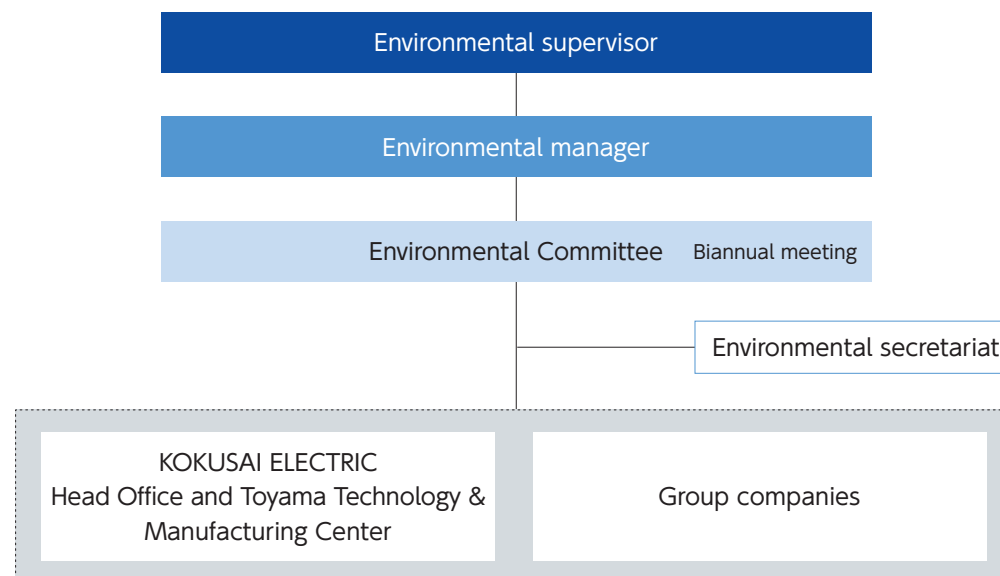
Promotion of environmental education, improvement activities conducted under the departments' environmental management programs, and environmental volunteer activities

#### Eco-product

Compliance with Japanese and overseas product-related laws and regulations, management of chemical substances contained in products, and practice of Design for the Environment

#### Eco-factory

Reduction of energy use and waste generation



### Evaluation of Environmental Management

#### • Toyama Prefecture Recycling Certification System

The Toyama Technology & Manufacturing Center was granted an Eco Business Certificate from Toyama Prefecture in March 2020. (The certificate is valid until March 31, 2025.) An "Eco Business" is defined as a "place of business that proactively engages in efforts such as curbing the generation of waste, recycling, and environmentally friendly business activities." The Company has been granted the certification continuously since 2010.

We believe this certification is in recognition of our 3Rs waste management efforts to reduce the final waste disposal volume, gaining of ISO 14001 Environmental Management System certification, and environmentally friendly business activities such as reducing CO<sub>2</sub> in transportation to and from our business sites in Japan.



富山県認定  
エコ事業所

## Creation of a Sustainable Society and Conservation of the Global Environment

## Environment Action Targets and Results for Fiscal 2021 (Toyama Technology &amp; Manufacturing Center)

The results and evaluation of the environmental action plan for fiscal 2021 are as follows.

Since fiscal 2019, we have been vigorously promoting environmental activities toward the targets set for fiscal 2021, which is the final year of the medium-term plan.

Evaluation criteria Achieved 100% Achieved 80% or more Achieved less than 80%

Category		Action goal	SDGs	Index			Fiscal 2021		Evaluation
							Target	Results	
Eco-management		Nurture an environmental mindset in all employees		Participation rate in environmental education			100%	100%	
				Development of "eco people*1"			20	87	
	Ecosystem Preservation	Number of ecosystem preservation activities implemented		Number of activities implemented	New	Implementation	4	4	
					Ongoing	Ongoing activities	31	31	
	Collaboration with Stakeholders for the Environment	Number of environment-related social contribution activities implemented*2		Number of activities implemented			3	3	
Eco-product		Environmental design assessment		Assessment rate			100%	100%	
Eco-factory	Global Warming Prevention	Improve energy use per unit		Rate of energy use per unit (compared to previous year or 5-year average)			99% or below	76%	
		Reduce transportation energy used per unit		Rate of transportation energy used per unit of production (reference year 2006)			55% or above	59%	
	Effective Use of Resources	Improve waste and valuables generation per unit		Rate of waste and valuables generation per unit (reference year 2005)			55% or above	60%	

\*1 Persons who passed the Certification Test for Environmental Specialists (Eco Test) of the Tokyo Chamber of Commerce and Industry

\*2 Number of activities implemented in such areas as environmental education, information exchange, community contribution through cleanup projects, etc., lights-off campaigns, and community energy-saving activities.



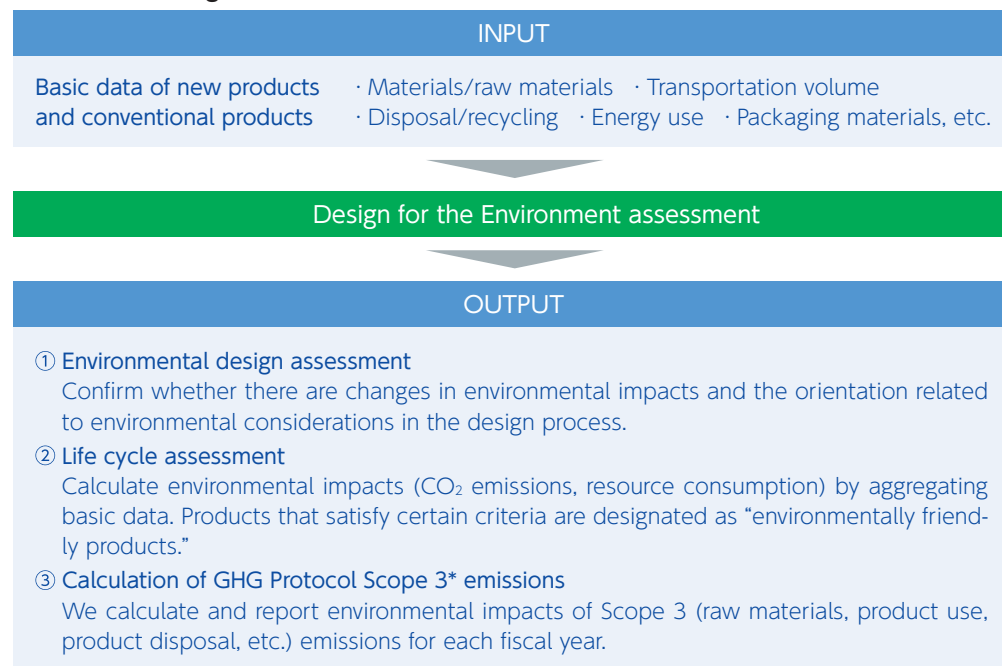
## Contribution to a Clean World by Enhancing Product Quality

### Approach for Development of Environmentally Friendly Products

In order to realize an environmentally harmonious and sustainable society through the provision of products and services, the Company strives to reduce the environmental impacts of products throughout their entire life cycles and promote efficient use of finite resources, thereby contributing to environmental conservation and providing customers with environmentally friendly products. When developing new products and whenever there are changes in production activities and laws and regulations, we conduct Design for the Environment assessment comprising environmental design assessment and life cycle assessment.

With the aim of enhancing our employees' capabilities to conduct Design for the Environment assessment, we provided e-learning for which a 100% attendance rate was achieved.

#### Structure of Design for the Environment Assessment



\*GHG Protocol: International standards for calculating and reporting greenhouse gas emissions

Scope 1: Direct GHG emissions that occur from sources that are controlled or owned by an organization

Scope 2: Indirect GHG emissions associated with the use of electricity and heat purchased from other companies

Scope 3: Indirect GHG emissions other than Scope 1 and 2

### Appropriate Management of Chemical Substances Contained in Products

#### Compliance with Laws and Regulations

At KOKUSAI Electric, we strive to properly manage chemical substances contained in our products in compliance with Japanese and overseas environmental laws and regulations in order to prevent environmental contamination caused by products we ship. We have identified banned and restricted substances based on laws and regulations, share the information with our employees and business partners, and confirm that the chemical substances contained in our products satisfy the criteria of the respective laws and regulations. Moreover, from January 5, 2021, the EU Waste Framework Directive requires companies to register SVHCs\*<sup>1</sup> on the SCIP database, and we have registered our product information accordingly.

#### Management of Purchased Items

We make every effort to identify and manage chemical substances contained in purchased parts. As a tool for surveying chemical substances contained in parts and materials purchased from business partners, we use chemSHERPA®\*<sup>2</sup> (a scheme for communicating information on chemical substances contained in products) to collect information on chemical substances contained in products and obtain certificates declaring that a product does not contain banned substances.

For management of processed products, a system to mitigate the risk of processed products containing banned or restricted substances is in place. We research the chemical substances of auxiliary materials used in the manufacturing processes of our business partners through the chemical substance management certification program, and, if banned or restricted substances are identified, we will not use such processed products and will use alternatives.

\*1 SVHC (substances of very high concern) are substances in the Candidate List for eventual inclusion in Annex XIV of the REACH regulation.

\*2 chemSHERPA is a registered trademark of the Japan Environmental Management Association for Industry (JEMAI).



## Creation of a Sustainable Society and Conservation of the Global Environment

## Contribution to a Clean World by Enhancing Product Quality

### Reducing Energy Use in Transportation

For physical distribution of our products in Japan, since receiving the Commendation from Director-General, Maritime Bureau of the Ministry of Land, Infrastructure, Transport and Tourism as an excellent business accredited with the Eco-Ship Mark for fiscal 2012, we have been continuing modal shift to marine transportation. We have also been working to improve various distribution methods to further reduce environmental impacts.

#### 1 Monitoring of CO<sub>2</sub> emissions reduction

Implementation of measures to reduce energy use in transportation and calculation and cutback of the rate of transportation energy used per unit

#### 2 Stacking of truck cargo

Effective use of the empty space above cargo where items previously could not be stacked due to differences in size and number of pieces

#### 3 Modal shift

Greater shift from truck transportation we have used so far to coastal shipping and rail transportation

#### 4 Overseas shipments of products

Switch to the use of nearby ports of entry and airports to cut costs and shorten distances in transportation

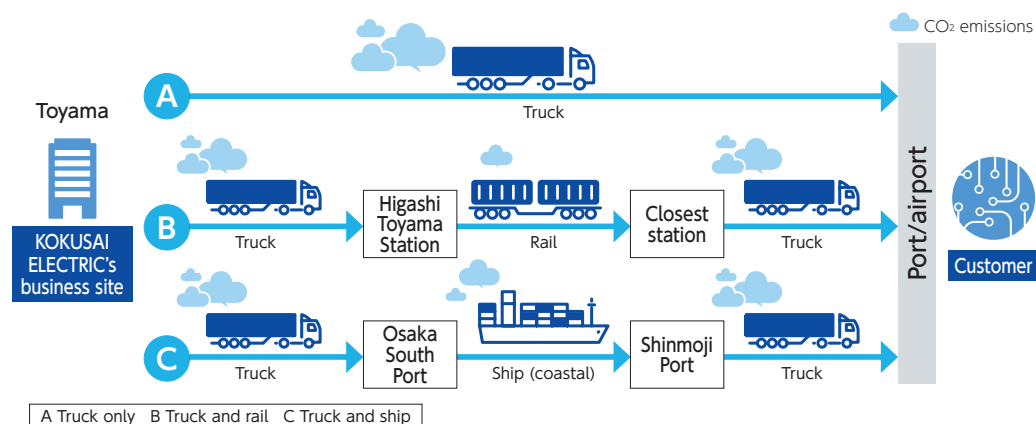
#### 5 Use of returnable boxes

Use of returnable boxes for some parts when shipping to customers in Japan

#### 6 Cardboard packaging

Switch from wooden crate packaging to simple packaging made with light and high-quality corrugated cardboard

#### Example of modal shift from truck transportation to rail and marine transportation (overseas customer)



## Addressing Climate Change

### Approach to Address Climate Change

To cope with global warming, a two-pronged approach is required. One prong is mitigation, which involves reducing greenhouse gas emissions, the principal causative agent of global warming. The other is adaptation, which involves reducing the adverse impact of climate change by adjusting natural ecosystems and social and economic systems in response to climate change.

For mitigation, we are promoting use of renewable energy, in addition to reduction of energy used in production (reduction of electricity consumption, energy saving, etc.), which we have been promoting. A solar power generation system has been in operation at the Toyama Technology & Manufacturing Center since April 2022. We will continue with the installation of facilities and the procurement of renewable energy.

Regarding adaptation, it would be better if the adverse impact of climate change could be avoided, but if it cannot be avoided even with maximum mitigation, it is necessary to minimize the damage. In order to reduce the occurrence of natural disasters and implement measures to ensure business continuity when they do occur, we cooperate with companies in our supply chain, in addition to our own efforts.

### Efforts to Address Climate Change

The 2015 Paris Agreement set out long-term, concrete initiatives to address global warming.

In August 2021, the IPCC\*<sup>1</sup> announced its prediction that the global average temperature increase will reach 1.5°C above pre-industrial levels between 2021 and 2040. It is important that companies in countries and regions around the world strengthen their initiatives to address climate change and balance anthropogenic greenhouse gas (GHG) emissions and absorption in the second half of this century.

We recognize the need for further initiatives designed to achieve progress toward a low-carbon society, and we will promote environmental investment as part of our social responsibility.

Having announced our endorsement of the TCFD\*<sup>2</sup> in August 2021, we are promoting initiatives in line with TCFD recommendations on disclosures of risks and opportunities related to climate change and are continuing information disclosure. We received a "B-" rating for our response to the Climate Change 2021 questionnaires of CDP\*<sup>3</sup> and aim to further improve our rating.

We are also considering setting science-based GHG emissions reduction targets (SBT\*<sup>4</sup>). We will set our medium- and long-term targets based on methods widely used internationally to promote GHG reduction activities.

\*1 IPCC: Intergovernmental Panel on Climate Change

\*2 TCFD: Task Force on Climate-related Financial Disclosures

\*3 CDP: Formerly, the Carbon Disclosure Project, CDP is a non-governmental organization (NGO). CDP conducts questionnaire surveys of companies and municipalities on their actions regarding climate change, water resources, and deforestation, and publishes the scoring results.

\*4 SBT: Science Based Targets (Science-based GHG emissions reduction targets)



## Energy Management/Waste and Hazardous Substance Management

### Approach to Save Resources

Efficient use of finite resources and recycling can reduce consumption, leading to reduction of environmental impacts.

We are promoting 3R\*1 of waste generated in the course of our production activities and little is left for disposal by landfill.

Based on the recognition of waste as a resource, we promote circulation of resources without generating waste in the pursuit of enhancement of resource efficiency.

Our efforts are currently directed toward the following.

- Reduction of the amount of waste emissions
- Shift from thermal recycling\*2 to material recycling\*3
- Shift from disposal of industrial waste to sale of resources (valuables) recovered from industrial waste

\*1 3R: Collective term for Reduce, Reuse, and Recycle

\*2 Thermal recycling: Recycling method to recover and utilize the thermal energy generated when incinerating waste

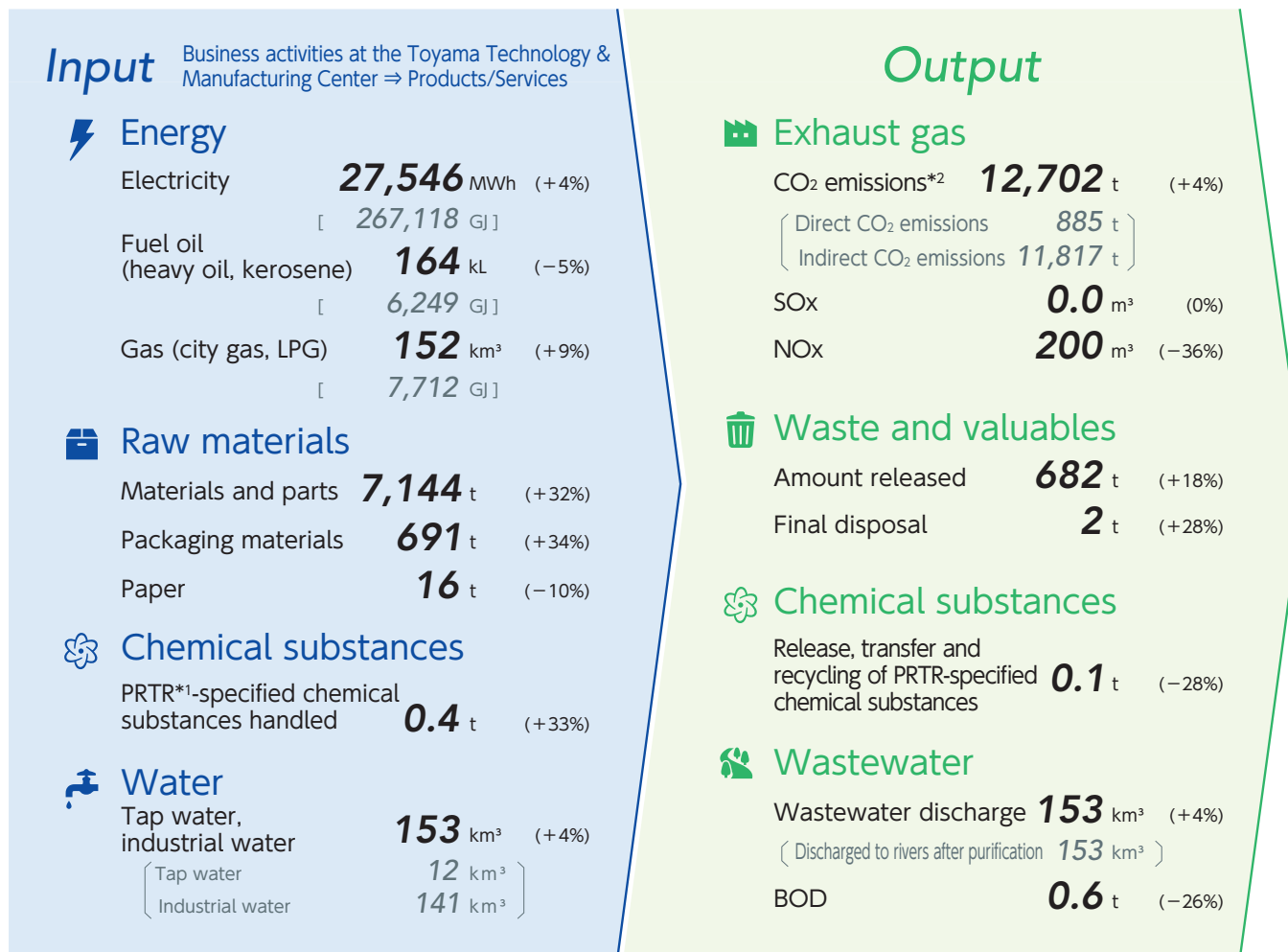
\*3 Material recycling: Method to reuse waste as materials for new products

### Business Activities and Environmental Impact

The Toyama Technology & Manufacturing Center emits CO<sub>2</sub> and waste as a consequence of expending resources and energy in order to make and provide products. It monitors their input and output, and works to reduce the use of hazardous chemical substances in R&D and increase energy efficiency.

For information on efforts to reduce the environmental impact of products, see the "Contribution to a Clean World by Enhancing Product Quality" page.

The values in parentheses show the change from fiscal 2020.



\*1 PRTR: Pollutant Release and Transfer Register

\*2 CO<sub>2</sub> emissions: Emissions were calculated based on the 2005 emission coefficients for electric power by country published by the International Energy Agency (IEA).

## Creation of a Sustainable Society and Conservation of the Global Environment

## Prevention of Global Warming and Energy Saving

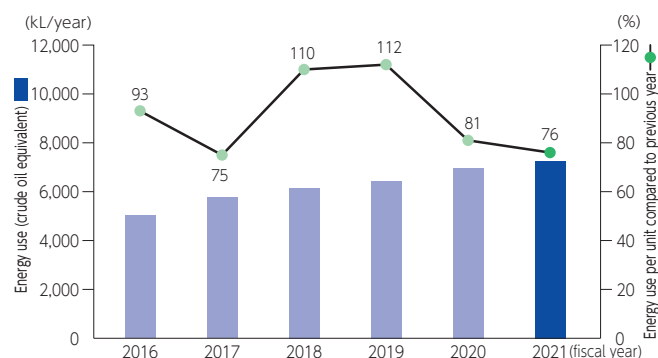
Much of the energy consumed by the Toyama Technology & Manufacturing Center is used for operating the evaluation equipment used for process development. Therefore, in order to lower the environmental impact of the equipment, we make every effort to use electricity more efficiently.

To save energy used by facilities, we carry out regular replacement of equipment, which includes upgrading to environmentally friendly air-conditioning equipment and switching to LED lighting. We also promote the use of renewable energy through solar power generation (solar panels).

We are also working to ensure facilities run optimally through measures such as automatically collecting data by digitally measuring room temperature management data and installing an industrial water recycling system to increase water use efficiency.

With regard to operations, in support of the national campaign against global warming promoted by the government since 2005, we implemented "Cool Biz" and "Warm Biz" campaigns. Furthermore, twice per year we have a "lights-off" day where we turn off the lights in the Toyama Technology & Manufacturing Center for a certain period of time so employees can gain a renewed understanding of the importance of the environment and experience first-hand the path toward achieving a low carbon society.

**Energy use (crude oil equivalent) and the rate per unit (Toyama Technology & Manufacturing Center)**

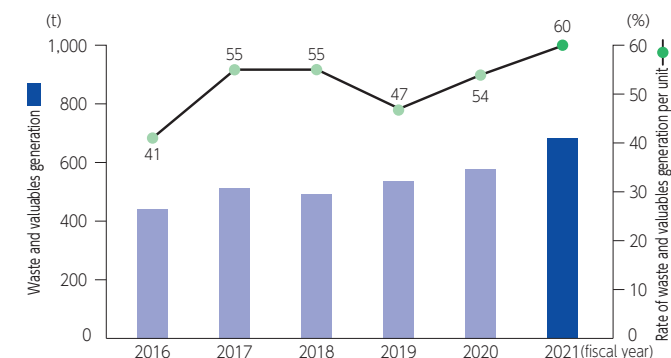


## Reduction of Waste

The amount of waste and valuables generated by the Toyama Technology & Manufacturing Center has been increasing along with the expansion of its operations. The Center is implementing various measures to curb the amount of waste generated. Waste acid, which accounts for a substantial proportion of the waste, was reduced by reviewing effluent treatment methods. We are constantly considering ways to reduce the amount of waste generated, including through the company-wide reuse of various types of waste such as packaging materials for product parts and materials procured. As a result, the rate of waste generation per unit improved to 60% in fiscal 2021 relative to fiscal 2015 (reference year).

We are also carrying out activities to reduce landfill waste in order to achieve zero emissions and promoting recycling of waste at the final disposal stage. Based on the recognition that proper sorting of waste is an effective approach, we provide education on the issue of waste twice a year to raise every employee's awareness of the importance of waste reduction and efficient use of resources.

**Waste and valuables generation and the rate per unit (Toyama Technology & Manufacturing Center)**



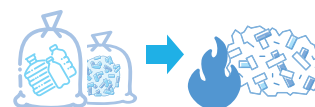
## Proper Disposal of Waste

The Toyama Technology & Manufacturing Center recycles much of the waste it discharges. Previously most plastic waste packaging materials underwent thermal recycling, but thanks to enhancing material and color sorting, we can now carry out material recycling of a portion of that waste. We conduct due diligence to ensure proper disposal methods that mitigate the impact on the environment as much as possible and contribute to effective utilization of resources.

We also make it a rule to visit the sites of waste treatment companies to confirm that our waste, which includes industrial waste, general waste and waste sold as valuables, is treated appropriately throughout the process from collection and transportation to disposal. Besides legal compliance, we also view environmental conservation as a priority and make every effort to ensure environmental pollution does not occur due to improper disposal.

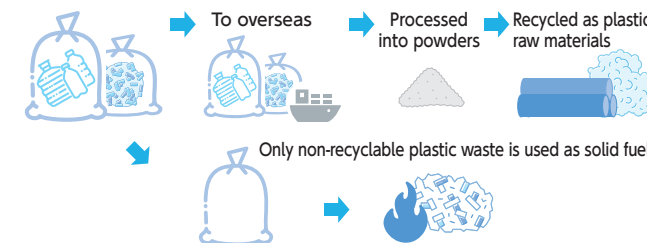
## Previously

Most plastic waste was used as solid fuel.



## After improvement

Thanks to enhanced sorting, much of the plastic waste is recycled as plastic raw materials.





## Promotion of Sustainable Procurement

### Approach to Promotion of Sustainable Procurement

We have established the procurement policy and the CSR policy in compliance with the international code of conduct to ensure compliance with respect to labor, the environment, safety, quality, etc. in our supply chain so as to contribute to society. We are working with our business partners to make improvements so that we can establish sustainable procurement activities.

#### Basic Policy for Material Procurement

##### 1 Compliance with laws and regulations and social norms

We shall comply with the laws and regulations of each country, social norms, and the CSR Code of Conduct, and conduct procurement activities with integrity based on corporate ethics.

We shall implement initiatives concerning the CSR Code of Conduct in line with the RBA Code of Conduct and strive to eliminate adoption of conflict minerals.

We request that our suppliers cooperate with us in ensuring compliance with laws and regulations and social norms in our supply chain.

##### 2 Prioritization of the environment

We shall conduct procurement activities with full consideration for conservation of the global environment and reduction of environmental impact in order to realize a sustainable society in harmony with the environment through our products and services.

We request that our suppliers follow our Green Procurement Guidelines and make efforts to conserve the environment and use and produce parts and materials with less environmental impact.

##### 3 Partnerships

We shall deepen mutual understanding with all our suppliers based on better partnerships and value relationships rooted in trust.

##### 4 Open door

We shall conduct the best possible business transactions, both in Japan and overseas, based on the principles of free competition. We shall always deal fairly and impartially with all of our suppliers. We select suppliers through appropriate procedures, considering material quality, delivery dates, prices, reliability of management, and the technological development capabilities of the suppliers, as well as evaluating whether they are fulfilling their social responsibilities.

##### 5 Provision of information and maintaining of confidentiality

We shall respond in good faith to our suppliers' requests and inform them of the information necessary for the transaction. At the same time, we seek useful information from our suppliers. We shall strictly manage trade secrets provided to us and maintain confidentiality.

### CSR-Oriented Procurement Activities

We are strengthening CSR supply chain management based on the RBA\* Code of Conduct and aim to share CSR awareness with our business partners. We request each of our business partners to confirm and submit a written agreement to ensure that the Basic Policy for Material Procurement and the CSR policy as well as the newly formulated Green Procurement Guidelines\* are thoroughly implemented throughout the supply chain.

\*RBA: Responsible Business Alliance. RBA members are from around the world, but primarily from the U.S. Since it was formed largely for the fulfillment of social responsibilities, the RBA has been promoting the Code of Conduct that it formulated, which includes suppliers in its target.

Green Procurement Guidelines (in Japanese) | <https://www.kokusai-electric.com/csr/environment/procurement/>

### Reinforcement of Partnerships

The Company held business partner meetings (BPMs) and the New Year reception even during the COVID-19 pandemic, albeit in an online format, to reinforce partnerships. At the New Year reception, we shared our medium- and long-term business policies with our business partners, and commended excellent partners. In BPMs, we brief attendees on our business policies and trends as well as our procurement, production, quality and CSR measures. Through these opportunities, we strive to strengthen mutually beneficial "win-win" relationships with our business partners. In response to global supply chain disruptions, we have doubled the frequency of BPMs to four times a year to strengthen collaboration with our business partners.

### Promotion of Globalization

We share procurement strategies with our overseas production bases to strengthen procurement capabilities of the Group as a whole. We will work to standardize rules and management to promote integrated global procurement.

### Deployment of Procurement BCP\*

We are strengthening deployment of procurement BCP in view of the increasing supply impact from supply chain disruptions caused by COVID-19 lockdowns and regional conflicts.

\*Procurement BCP: Procurement Business Continuity Plan. We have formulated and have in place a procurement BCP, including thorough promotion of standardization, consideration of alternative materials, creation of a database of production bases for procurement products, vigorous promotion of multi-sourcing, etc.

### Measures against the Issue of Conflict Minerals\*

Regarding conflict minerals, we are strengthening initiatives by promoting information sharing with our business partners in order to ensure that our procurement activities across our supply chain do not benefit armed groups that encroach upon human rights.

\*Conflict minerals: Tin, tantalum, tungsten, gold (collectively "3TG") as well as cobalt from the Democratic Republic of the Congo (DRC) and adjoining countries are designated as conflict minerals.

## Human Resources Management as a Source of Innovation

### Creating workplaces where all employees of the Group can enhance their abilities and fulfill active roles

We recognize that people are the source of the Group's business activities. Diversification of human resources and work styles, individuals' growth through daily efforts, and maintenance and improvement of health and safety are essential for sustainable development of a company.

We will continue to promote initiatives for diversity & inclusion, development of human resources capable of coping with the rapid pace of globalization, and health & productivity management to strengthen the foundation for innovation.

## Promotion of Diversity & Inclusion

### Approach for Diversity & Inclusion

The social environment is changing drastically due to factors such as a rapidly declining birthrate and population aging. For us to achieve sustainable growth and development, we need to create new value by leveraging the diversity of our employees. In order to advance boldly in the global arena, we will make full use of the diversity of our employees, who have different backgrounds, perspectives, and values, and link it to corporate growth, thus cultivating an environment in which motivated employees can enjoy taking on challenges and becoming increasingly active on the world stage.

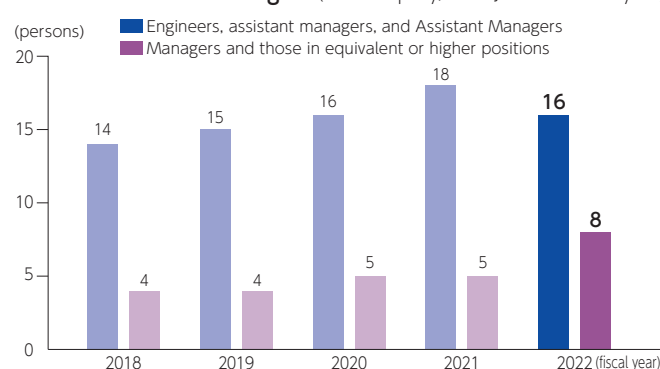
### Promoting Employment of Diverse Human Resources

The Company actively hires global human resources and people with disabilities to create a diverse workforce. In particular, since a large proportion of job-seekers with disabilities seek employment in the Kanto area, we consider additional departments to which we can assign them, depending on the type of work, to promote assignment of employees with disabilities to the head office.

### Efforts to Promote Female Empowerment in the Workplace

The Company's basic policy is to promote the active participation of people in the workplace without gender bias. We have formulated an action plan and carry out efforts to promote female empowerment in the workplace to contribute to corporate growth by taking full advantage of diverse employees representing different backgrounds, points of view, and

**Number of female managers** (the Company, as of June 1 of each year)



values. In fiscal 2021, the CEO conveyed a message about our efforts to address the Act on Advancement of Measures to Support Raising Next-Generation Children and the Act on the Promotion of Female Participation and Career Advancement in the Workplace. We also started an online seminar for all female employees given by external experts on "female health measures," which all group companies recognize as an important issue. Going forward, depending on internal needs, we will provide female employees with opportunities to think about their career development and medium- to long-term career paths through discussions and exchanges of opinions. We intend to promote empowerment through creating role models across departments and providing continuous support with mentor-like figures.

### Consultation Counter for Persons with Disabilities

Based on the Revised Act on the Promotion of the Employment of Disabled Persons and the subsequent partial revision, we have established a system for supporting both employees with disabilities and their workplaces, setting up a consultation counter in order to respond appropriately to their needs and concerns. The consultation counter responds to various inquiries from employees with disabilities and workplaces and also provides advice to workplaces regarding reasonable accommodations.

### "Tai-wa" with the Union

The Company has concluded an agreement with the KOKUSAI ELECTRIC Labor Union, under which labor-management conferences are held regularly to discuss labor conditions and personnel systems, how to activate employees, and other issues. Through these conferences, labor and management work together to establish disciplinary rules for the workplace and maintain and improve the workplace environment. The labor agreement specifies that the Company and union hold such labor management conferences regularly to facilitate communication, ensure smooth business operations and growth, and improve the working conditions of employees. In this way, labor and management exchange opinions constructively in regard to various issues such as "management policies" and business operations, thereby establishing healthy and stable relations between workers and management.



## Human Resources Management as a Source of Innovation

## Work Style Reforms

### Approach for Work-life Balance

As Japan faces a declining birthrate and population aging, the needs of people who balance work with family responsibilities such as child-rearing and nursing care have become more diverse. Thus, establishing an environment that expands work opportunities and enables workers to fully realize their ambitions and utilize their skills to improve productivity and achieve work-life balance has become an important issue for companies. The Company supports a work-life balance with various measures.

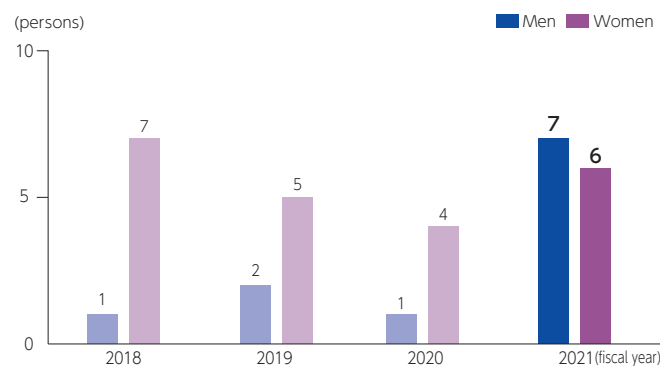
### Support for Balancing Work and Family Life

Recognizing the importance of achieving a good balance between rewarding and fulfilling work and a sound and comfortable life, the Company has been working to develop and enrich programs that help workers realize a good balance between work and family responsibilities such as child-rearing and nursing care.

In fiscal 2021, the CEO conveyed a message about our efforts to address the Act on Advancement of Measures to Support Raising Next-Generation Children. We also shared information on childcare leave for male employees by

posting examples in internal newsletters and on the intranet. In fiscal 2022, we are implementing e-learning for managers in accordance with the revision of the Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members to encourage male employees to take childcare leave.

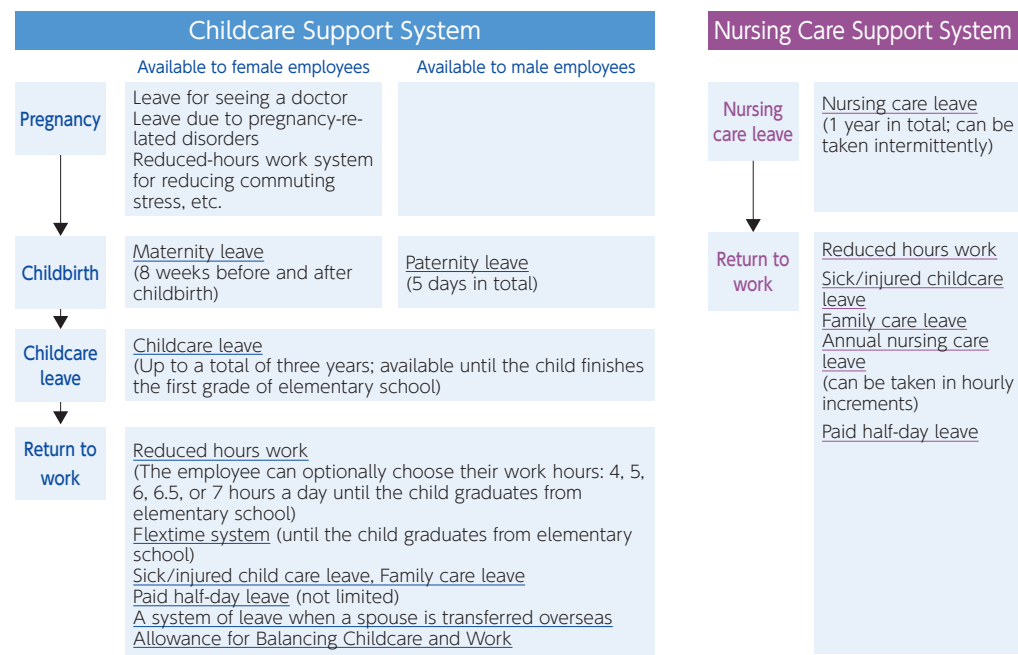
**Number of employees who took childcare and nursing care leave** (the Company)



### Allowance for Balancing Childcare and Work Program

As part of efforts to create an environment where employees rearing children can continue to make a full contribution at work, the Company introduced the "Allowance for Balancing Childcare and Work" program on April 1, 2017. This program provides employees who are raising a child or children prior to completion of the third grade of elementary school, whether in a dual-income household or as a single parent, with financial assistance to cover childrearing expenses, such as preschool fees and fees for after-school childcare facilities.

#### Systems for supporting childcare and nursing care



(Underlining indicates where the contents of a system or a system itself exceeds the legal obligations.)

## Human Resources Management as a Source of Innovation

## Development of Human Resources Who “Learn on Their Own, Think on Their Own and Act on Their Own”

### Approach for Development of Next-generation Human Resources

Our philosophy for human resources development is to develop human resources who “learn on their own, think on their own and act on their own.” We provide training programs for employees, regardless of whether they are new graduates or mid-career hires, to help them improve their knowledge and skills and for their career development from the time they join KOKUSAI ELECTRIC. The programs we offer include training by instructors from within and outside the Company that enable trainees to master the necessary technology and gain the necessary knowledge for work, technical lectures on open innovation, language training to develop global human resources, and presentation training including practical tips for effective presentations.

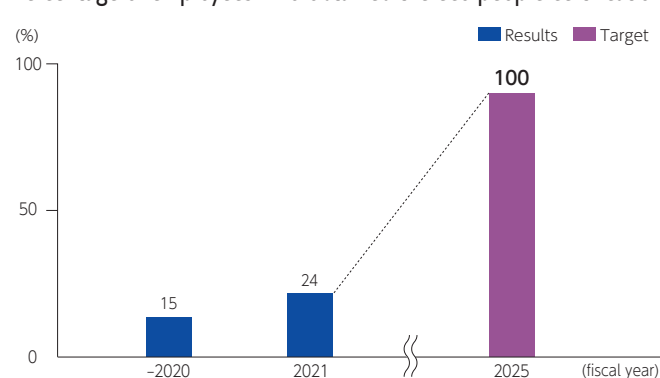
### Development of “eco people\*”

Toward realization of an environmentally harmonious and sustainable society through the provision of products and services, we are developing eco people\* to deepen the basic knowledge and understanding of the concepts necessary for all employees to engage in environmental conservation.

We have been encouraging employees to obtain the eco people certification for some time. We formulated a five-year plan in 2021, aiming for all employees to obtain the certification by fiscal 2025. In 2021, 87 managers passed the test and obtained the eco people certification.

\*Persons who passed the Certification Test for Environmental Specialists (Eco Test) of the Tokyo Chamber of Commerce and Industry

Percentage of employees who obtained the eco people certification



### E-learning

We are promoting e-learning for various subjects to enhance awareness of our employees.

We also offer job-specific training, such as education for engineers, and position-specific training.

#### Examples of major e-learning programs for all employees

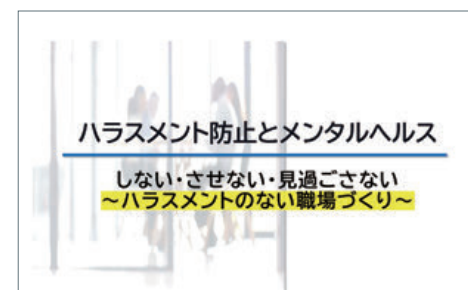
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|---|--|
| <b>1</b> Export Control Basics                              | <b>6</b> Harassment Prevention and Mental Health |
| <b>2</b> Key Points for Understanding the Subcontractor Act | <b>7</b> Physical Health                         |
| <b>3</b> Fraud Prevention in Procurement                    | <b>8</b> Healthcare                              |
| <b>4</b> Eco-mind   | <b>9</b> Work Management                         |
| <b>5</b> Waste  | <b>10</b> Compliance                             |
|   | <b>11</b> Information Security                   |



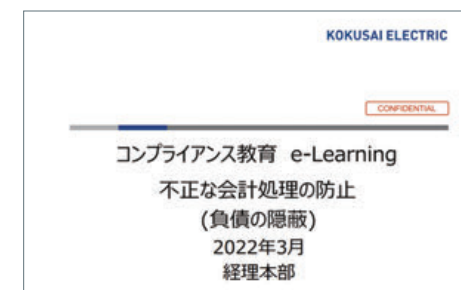
Export Control Basics



Eco-mind



Harassment Prevention and Mental Health



Compliance

## Maintaining and Enhancement of Health and Safety of Employees

### Health & Productivity Management Declaration

Based on the Corporate Statement, "The KOKUSAI ELECTRIC Group strives to create value through "Technology" and "Tai-wa" to realize a sustainable society that is safe, comfortable and vibrant," our unchanging basic principle is to prioritize health and safety in all of our business activities. In line with this principle, we declare that we will actively work to improve the mental and physical health of our employees.

October 22, 2021 **Yuji Kamiya**  
Director, Executive Vice President and Executive Officer

### Health & Productivity Management

#### Promoting health & productivity management

Based on the Health & Productivity Management Declaration, the Company strives to go beyond merely complying with laws and providing standard healthcare. Our goal is to maintain and improve the health of employees as a strategic labor investment for the future.

For its initiatives in fiscal 2021, KOKUSAI ELECTRIC was recognized as a 2022 Certified Health & Productivity Management Outstanding Organization under the program jointly implemented by the Ministry of Economy, Trade and Industry (METI) and the Nippon Kenko Kaigi.

Moreover, in fiscal 2022, we have introduced a health management system for centralized management of the results of health checkups and other health data to analyze trends in health issues and verify the results so as to promote health & productivity management linked to the management strategy

#### Infectious disease risk prevention measures

We have implemented countermeasures for COVID-19, influenza, and other infectious diseases and have established a workplace environment where employees can work with peace of mind.



#### Physical health

We work to ensure the early discovery and prevention of disease by following up when employees' health checkup results call for additional testing, such as providing consultation and encouraging employees to see the doctor.

#### Mental health

We offer courses on self-care and train supervisors to notice potential mental health problems in employees. We also engage in efforts to improve the workplace environment based on the results of group analyses of employee stress checks.

We also hold regular counseling sessions by an occupational psychologist to help those with mental wellbeing issues.

#### Number of employees taking leave for mental illness (domestic Group employees)

Number of those who were absent for seven or more days per month  
If the same employee takes multiple leaves of absence within the fiscal year, they are counted as one person.

(persons)

Number of employees taking leave	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
Domestic Group total	11	11	8	14

### Countermeasures for Excessive Work

As a measure to prevent excessive work, the Company requires employees to apply in advance for an overtime agreement when working over 40 hours of overtime per month, and has also issued an internal notice to ensure that employees do not work overtime for 80 hours or more per month. In order to prevent a long-term heavy workload from continuing, for employees who work 60 hours or more of overtime per month, we implement measures to reduce overtime work from the following month onward by confirming with their workplace the reasons for the heavy workload and measures to reduce the workload. Employees who work 60 hours or more of overtime per month receive a health check in the following month as part of our efforts to monitor their health. In addition, we have set one day a week on which employees are required to leave the office without working overtime, in order to raise awareness of the importance of a work-life balance and thus promote work style reform.



## Human Resources Management as a Source of Innovation

**Philosophy on Safe Workplace Environments**

The Toyama Technology & Manufacturing Center, our production base in Japan, and Kokusai Electric Korea Co., Ltd., have acquired ISO 45001, which specifies requirements for an occupational health and safety management system. Both are working to build and maintain workplace environments where employees and customers can work safely worldwide. Furthermore, as part of our efforts to combat COVID-19, we have established a Novel Coronavirus Response Headquarters which is headed by the president. We have also formulated our own disease prevention rules that are even more rigorous than the "New Lifestyle" measures advocated by the Japanese government for the main purpose of preventing clusters of COVID-19 cases from occurring within the company, and engage in efforts to keep employees safe and healthy.

**Safety Management****Disaster Management**

The Company carries out systematic disaster management activities to ensure the safety of every employee in the event of an emergency.

The fiscal 2021 comprehensive evacuation drill was conducted during the COVID-19 pandemic, following the fiscal 2020 drill, but since a disaster can occur even in a pandemic, we carried out the drill considering evacuation methods that incorporate measures to prevent infection.

The first responder in an emergency is the Company's firefighting team. Around 100 employees from the Toyama Technology & Manufacturing Center and about 20 from the head office are active members of the Company's firefighting team.

All new employees at the Toyama Technology & Manufacturing Center are expected to join the Company's firefighting team. They learn how to prepare for and respond to disasters through monthly drills, and are trained to play an active role in disaster response measures outside the company as well, which includes assisting in evacuations, firefighting, first aid, and calling for help.

**Number of work accidents** (domestic Group employees and temporary workers)

Lost-time work accidents: 4 or more days of missed work \*Excluding commuting accidents (persons)

Calendar year	2019	2020	2021
No lost time	4	3	6
Lost time	1	1	0
Total	5	4	6

**Frequency rate of work accidents** (domestic Group employees and temporary workers)

Number of work accidents resulting in one or more lost days of work / Total number of working hours x 1 million hours \*Excluding commuting accidents (accidents)

2019	2020	2021
0.51	0.09	0.00

**Number of occupational deaths** (the Group, by region)

Calendar year	2019	2020	2021
Japan	0	0	0
Asia (excluding Japan)	0	0	0
Americas, Europe, and others	0	0	0
Total	0	0	0

## Respect and Consideration of Human Rights

### Pledged to strive to resolve issues as a United Nations Global Compact signatory

In order to build a society in which people can enjoy a safe, secure, and happy life, all human rights must be respected and none infringed.

As well as raising awareness of our employees about human rights, as a signatory to the United Nations Global Compact, we are striving to resolve issues concerning human rights and labor practices at a higher level to fulfill our responsibility to respect human rights.

#### KOKUSAI ELECTRIC Group Human Rights Policy

The KOKUSAI ELECTRIC CORPORATION ("KE") and its group companies ("KE Group") will support a future in which creativity and innovation are generated through "Technology" and "Tai-wa", while helping to realize a society where human rights are respected. As a prerequisite to this, KE Group seeks to meet its responsibility to respect human rights.

#### Responsibility to Respect Human Rights

KE Group strives to meet its responsibility to respect human rights by not infringing on human rights and addressing negative human rights impacts with which KE Group may be involved through its operations and businesses relationships.

In particular, we consider the following items of human rights material.

- Prohibition of child labor, forced labor and human trafficking  
We shall never tolerate any form of child labor, forced labor and human trafficking.
- Prohibition of discrimination and Equal opportunities  
We shall never discriminate basing on race, religion, gender, age, sexual orientation, disability, nationality nor on any other grounds. Furthermore, we shall never engage in any harassment nor any other conduct that offends individual dignity.
- Equal payment for equal work  
We shall respect and observe applicable local laws and regulations regarding equal pay for equal work.
- Freedom of federations  
We shall respect the right of our employees to freely form

and join federations. We shall also respect the right of our employees to engage in voluntary discussions and negotiations about their relationships with their employers, and the right of our employees to refrain those activities.

Responsibility to respect human rights applies to all officers and employees of KE Group. We also shall require our all suppliers and business partners to observe this policy.

Furthermore, even if KE Group is not directly contributing to negative human rights impacts, KE Group expects its business partners and other parties whose own impacts may be directly linked to KE Group's operations, products or services to respect and not infringe upon human rights, and will respond appropriately where they are not respecting human rights.

#### Relationship to KE Group's values and policies

KE Group is aware that as a business enterprise it is a member of society and can contribute to creating an environment in which human rights are respected. We believe that meeting the responsibility to respect human rights is key to operating as a responsible business, and should be expected of all companies. This human rights policy is an expression of our commitment to fulfilling these responsibilities based on KE's Corporate Statement, KOKUSAI ELECTRIC Way, and Guidelines and Commitments.

#### Exercising the Responsibility to Respect Human Rights

KOKUSAI ELECTRIC is committed to meeting the responsibility to respect human rights through implementing the United Nations Guiding Principles on Business and Human Rights. Moreover, we shall support and respect human rights codes of con-

duct as defined by the International Bill of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Labor, the Convention on the Rights of the Child, the OECD Guidelines for Multinational Enterprises, The Responsible Business Alliance (RBA), and Ten Principles of the United Nations Global Compact.

To this end, KE has established a human rights due diligence internal system based on the United Nations Guiding Principles on Businesses and Human Rights and continued to implement and improve this system by identifying and assess potential and actual impacts on human rights and take appropriate measures to prevent or mitigate risks.

Where KE Group identifies that it has caused or contributed to a negative human rights impact, it will carry out appropriate internal and external processes to provide remediation.

KE Group adheres to national law and regulation in each market in which it operates. Where KE Group faces conflicts between internationally recognized human rights and national laws, KE Group will follow processes that seek ways to honor the principles of international human rights.

KE Group will provide appropriate training and capacity building in order to embed this policy commitment throughout KE Group.

KE Group is committed to engaging in "Tai-wa" with and consulting relevant external stakeholders about addressing potential and actual human rights impacts.

KE will disclose its efforts to respect human rights through its website and other means of communication.

#### Training to Increase Awareness about Human Rights

- In addition to a program designed to raise employees' human rights awareness in order to prevent the occurrence of discrimination, we provide training on respect for the human rights of all people.
- We provide employees with harassment prevention education, using sexual harassment, abuse of authority, and pregnancy discrimination as examples. The program is designed to ensure trainees are aware of the nature of harassment defined in law and the importance of preventing harassment and of understanding the types of conduct that may constitute harassment, and how to behave and prepare oneself so as not to engage in harassment, not to let others do so, and not to overlook it.

#### Participation in the United Nations Global Compact

We joined the UN Global Compact as well as the Global Compact Network Japan, which is comprised of Japanese signatories to the UN Global Compact, on June 23, 2022.

Signatories to the UN Global Compact are required to commit to complying with the Ten Principles in four fields of human rights, labor, the environment, and anti-corruption and their implementation. As a signatory to this international initiative, we will strive to resolve issues in the human rights and labor fields at a higher level.

## Contribution to Society through Creativity and Innovation

### Creativity and innovation for development and production of products that exceed society's expectations

We believe that a wonderful future will emerge through creativity and innovation around the world, shaped by people's dreams, ideals, expectations, and needs. Semiconductors are an integral part of a scene that brings about such creativity and innovation.

We will continue to create and innovate through our semiconductor manufacturing equipment business so that higher quality semiconductor devices and groundbreaking applications using semiconductors will be created and a wonderful future will emerge.

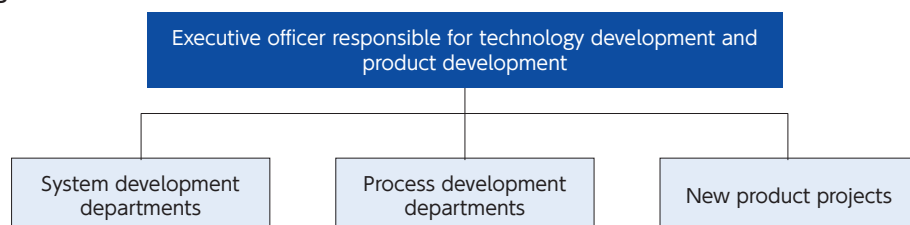
#### R&D Policy

The Company develops semiconductor manufacturing equipment leveraging the top film forming technologies in the world. In addition to providing underlying film forming technology, we are also striving to overcome physical limitations with miniaturization through joint development with research institutes, universities, raw material manufacturers, and device manufacturers. We are also vigorously promoting development of advanced elements that adapt to changes in device structures and materials. Our film forming technology and treatment technology are used by the world's top device manufacturers, and greatly improve the functionality and performance of semiconductors. Semiconductors that utilize our film forming technology are found in electronic devices around the globe and contribute to making people's lives safer and more comfortable.

#### R&D System

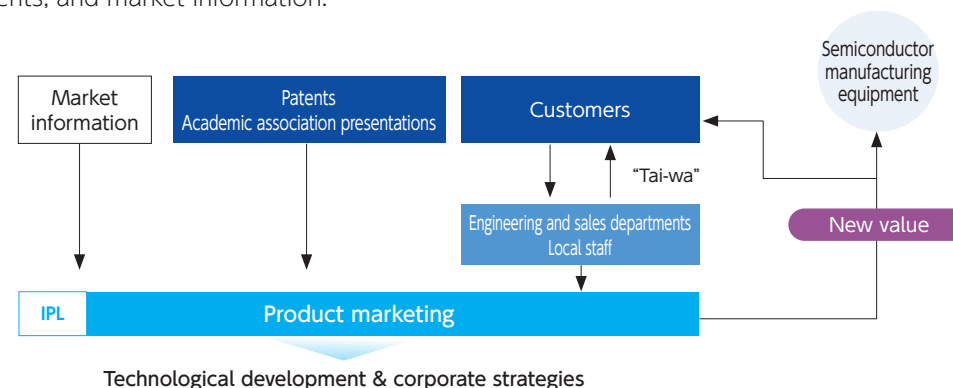
Semiconductor device development is advancing around the globe. We have research institutes worldwide and have established a comprehensive research system. Since it requires technology from a wide range of fields — including machinery, electronics, heating, fluids, physics, chemistry, AI, and machine learning — we have assembled a team of experts representing each one. Our aim is to create an R&D team and continue to overcome difficult problems by leveraging our own technology and collaborating with consortiums, universities, and development partners around the world.

#### Organizational Structure



#### Product Marketing

In order to improve our products and provide high value to customers, our engineering and sales departments and local staff engage in "Tai-wa" with customers and share customers' views within the company. We also strive to create new value Group-wide by driving forward proposals that lead to new technological developments and corporate strategies, through an initiative called "intellectual property landscape" (IPL) that provides an overview and comprehensive analysis of academic association information, patents, and market information.



#### Initiatives to Enhance Digital Transformation (DX)

Our unique mission-critical system, centering on production management, is at a level that we can be proud of and has supported our business to date. On the other hand, in order to find the optimal solution for the entire Group and continue to grow far into the future, it will be necessary to expedite management judgment and decision-making, adapting to changes in the business environment and business style. To this end, we are taking a major step toward global standards through the updating of our mission-critical system, to strengthen the Group's governance structure and promote business process transformation.



## Contribution to Society through Creativity and Innovation

## Pursuing Quality

We provide customers with products and services in which emphasis is placed on safety, quality, and environmental soundness through “Technology” and “Tai-wa”, in order to realize a sustainable society and earn the trust and confidence of our customers and society.

### Quality Policy and Quality Objectives

To accurately grasp customer requirements and implement quality assurance activities to achieve quality that satisfies customers, we formulated the Quality Policy and Quality Objectives, which are reviewed on an annual basis.

#### Quality Policy

THE KOKUSAI ELECTRIC Group aims to be the top company in customer satisfaction by developing and producing equipment that exceeds customers' expectations and contributes to customers' profits.

- (1) Achieve quality that earns customer trust and satisfaction.
  - (2) Provide competitive products and services to our customers on time.
- To this end, all employees shall perform their duties with sincerity, in accordance with the basics and ethics, and shall think and act on their own initiative from customers' viewpoints and strive for continuous improvement.

#### Quality Objectives

- (1) Business process transformation  
Reform your department's own business processes from customers' viewpoints.
  - 1) Decide which business processes are to be reformed.
  - 2) Decide on metrics (KPIs) to measure the results (degree) of reform and implement a PDCA cycle on a monthly basis.
- (2) Product and service quality reform  
Formulate your department's targets and measures and promote cooperation for product and service quality reforms.

## Ensuring Quality

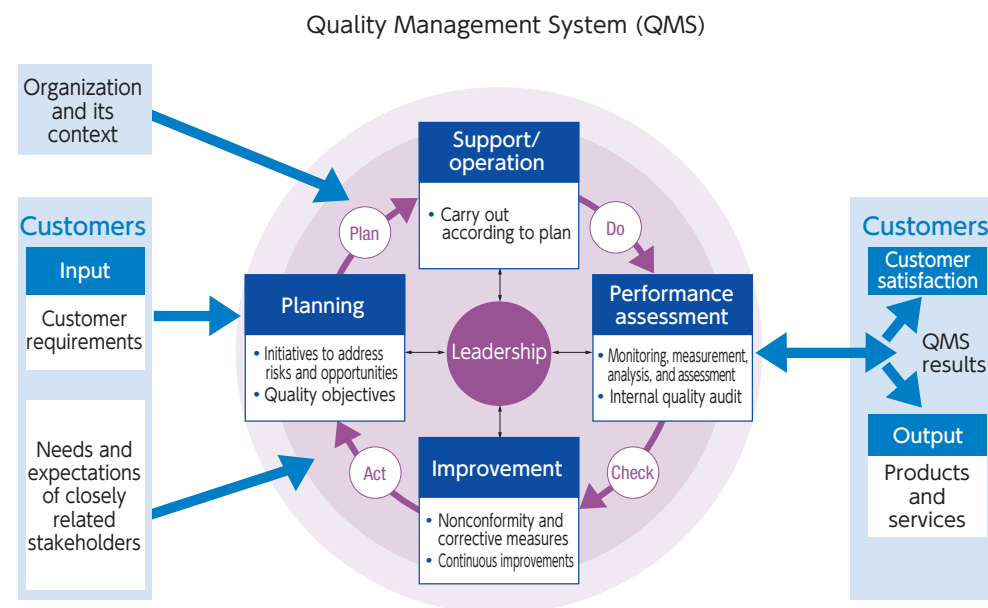
### ISO 9001 Certification and Quality Management System

The Group's production sites have acquired ISO 9001 certification. We have built a quality management system based on a PDCA cycle using a process approach, and continuously make improvements. Furthermore, we are also strengthening D-FMEA\*<sup>1</sup> and P-FMEA\*<sup>2</sup> activities to improve the quality of work. Through these efforts we provide products and services that meet customers' needs.

\*1 D-FMEA: Design Failure Mode and Effect. Analysis Method to predict and prevent potential failures and accidents in the design stage by identifying failure modes simplified for each component and unit that make up a product, and forecasting the impact the failure modes would have on the product

\*2 P-FMEA: Process Failure Mode and Effect. Analysis Method to improve production process through extracting the mode to cause each of the failures/mistakes over the entire process, evaluating the effect of the mode, and thereby designing the measures to prevent failures

## Activities to Maintain and Improve the Quality Management System



We strive to improve the quality of products and services by creating training programs to boost each employee's quality assurance skills, carrying out company-wide activities to foster awareness on quality, and exchanging personnel involved in quality assurance and supporting their activities, which includes group companies and business partners.

### Policy to Address Quality Problems

When a defect is discovered, we search thoroughly for the technological cause and the motivational factor that lies behind it, and work to prevent recurrence.

Moreover, we hold the Quality Meeting as necessary, where responsible departments report to management and relevant departments on measures to prevent recurrence, to disseminate information and improve quality, thereby improving technology and preventing quality problems.

## Contribution to Society through Creativity and Innovation

### Activities to Raise Quality Awareness

We created an e-learning program featuring case studies of quality problems, which is provided to all employees to share information and raise quality awareness.

In addition, every November is designated as “Quality Month,” a time when we focus on raising quality awareness throughout the company. Activities during Quality Month include display of examples of quality problems, distribution of messages on quality from departments, and display of quality slogans and *senryu* poems solicited from employees.

### Enhancement of Customer Satisfaction (CS) Worldwide

We have been conducting an annual CS survey on our products and services covering customers worldwide, jointly with Group companies. After the responses are compiled and analyzed, the results are conveyed internally and shared with Group companies to make improvements and enhance customer satisfaction.

We strive to respond promptly to customer complaints and requests, analyze them, and share them internally.

## Efforts to Enhance the Global Network

We are working on a global level to improve the skills of field engineers who visit our customers' factories to provide support for installation, setup, maintenance, and service, as part of efforts to provide high-quality products and services that earn the trust and meet the expectations of our customers.

## Service Support

In addition to on-call service utilizing service bases in Japan and overseas, we provide remote support using wearable devices.

When difficult maintenance is required, local engineers wearing smart glasses share the on-site situation with engineers possessing advanced expertise who are at a remote location and provide support in real time.

We also offer a wide range of services to meet customer needs, including preventive maintenance and overhaul proposals to ensure stable equipment operation, parts supply services for prompt maintenance and repairs, and promotion of performance improvement, yield improvement, replacement of discontinued products, and modification to extend the life of equipment.

Through these support services, we contribute to reducing waste, raw material use, and CO<sub>2</sub> emissions throughout the product life cycle.

## Training Center

In order to ensure that our customers can use our products safely, we offer various training courses, including standard training on operation and maintenance. We support customers in their efforts to achieve efficient operation. We have training centers in five major regions around the world in addition to Japan. Customers can take training courses attuned to their needs at their nearest training center.

Online training is available for customers who are unable to visit our training centers. We are working to enhance the lineup of virtual training that utilizes the latest digital technologies (VR, AR, smart glasses, etc.).

Training materials and methods are shared with our overseas training centers, and we are striving to improve the content and quality of the training we offer. We will continue to improve our training curriculum to meet the needs of our customers, while at the same time, we will continue working to provide high-quality training to ensure customers use our equipment safely, effectively, and with peace of mind.



## Contribution to Society through Creativity and Innovation

**10 BEST SUPPLIERS award in TechInsights's customer satisfaction survey for the 25th consecutive year**

KOKUSAI ELECTRIC received a high rating in a customer satisfaction survey conducted by TechInsights Inc. based in Ottawa, Canada. The Company won the 10 BEST SUPPLIERS award, which recognizes top 10 highly acclaimed semiconductor manufacturing equipment suppliers who have earned high praise from customers, regardless of product type; THE BEST SUPPLIERS award, which recognizes semiconductor manufacturing equipment suppliers who have earned high praise from customers by product; and the RANKED 1st award in the deposition equipment category, which bestows special distinction on suppliers that achieve the highest rating from customers in any survey category.

We won the 10 BEST SUPPLIERS award for the 25th consecutive year.

We supply semiconductor manufacturing equipment utilizing cutting-edge technologies mainly for deposition processes of semiconductor manufacturing. The Company was named as one of the 10 BEST SUPPLIERS because it received particularly high ratings for the items "Collaboration with customers (Partnering)" and "Recommended Supplier."

The Group will continue to improve the performance and quality of products and services to better satisfy customers, while at the same time, under the corporate slogan "Technology & Tai-wa for Tomorrow," aiming to realize a safe, comfortable, vibrant, and sustainable society and enable sustainable development of the Group through efforts to deliver on both business needs and sustainability.

**Earned Intel EPIC Distinguished Supplier Award 2022**

KOKUSAI ELECTRIC earned EPIC Distinguished Supplier Award from Intel Corporation.

"As one of only 26 Distinguished Supplier Award recipients across the Intel global supply chain, KOKUSAI ELECTRIC has been crucial to Intel's success while offering agility and flexibility during the ongoing volatile supply chain environment," said Keyvan Esfarjani, EVP and Chief Global Operations Officer at Intel. "They have provided exceptional collaboration and commitment toward safety, quality, diversity & inclusion, and exceeded our expectations in support of Intel's supply chain operational excellence. Earning this award speaks to their dedication to Intel values and their partnership."

The Intel EPIC Distinguished Supplier Award recognizes a consistent level of strong performance across all performance criteria. Of the thousands of Intel suppliers around the world, only a few hundred qualify to participate in the EPIC Supplier Program. The EPIC Distinguished Award is the second-highest honor a supplier can achieve. In 2022, only 26 suppliers in the Intel supply chain network earned this award.

To qualify for an Intel EPIC Distinguished Supplier Award, suppliers must exceed expectations, meet aggressive performance goals, and score 80 percent or higher in performance assessments throughout the year. Suppliers must also meet 80 percent or more of their improvement plan deliverables and demonstrate formidable quality and business systems.





## Community Contribution Activities and Efforts to Coexist with Local Communities

### Contributing to development of local communities to achieve mutual growth by cherishing the environment and people.

Having good relationships with society and local communities is indispensable for our business activities. Our awareness that values connections with local communities has become even stronger. We will vigorously engage in various activities so that we can continue to develop and grow in harmony with the natural environment and the residents of all the communities where we operate.

#### Support for Traditional Performing Arts

Every year the Toyama Technology & Manufacturing Center donates to the Owara Kaze-no-Bon and Hikiyama festivals to maintain friendly relations with the community where the center is located and help promote the community.



Toyama Tourism Organization  
(a public interest incorporated association)

Owara Kaze-no-Bon is a festival held every year from September 1 to 3 in the town of Yatsuo, located in Toyama City, Toyama. Eleven neighborhoods in the center of Yatsuo participate, each one performing dances to the mournful tune of the folk song "Ecchu Owara Bushi."

The Hikiyama Festival is held every year on May 3 in Yatsuo. A spring festival of Yatsuo Hachiman Shrine dating back to the middle of the Edo Period, it consists of participants moving six lavishly decorated wooden floats through the hilly streets of the town. Crowds gather from all over to see the festival.

Due to the COVID-19 pandemic, Owara Kaze-no-Bon was canceled in 2020 and 2021, and the Hikiyama Festival was scaled down in 2021. Both Owara Kaze-no-Bon and Hikiyama Festival were held on a reduced scale in 2022. They are the biggest festivals in Toyama Prefecture, and a portion of the donations helps pass on the prefecture's traditional culture.

#### Sponsor of KATALLER TOYAMA

The Company contributes to the development of the community, cultivation of youth, and promotion of sports by sponsoring the Toyama-based Kataller Toyama, a member of the J3 League of the Japan Professional Football League.



#### Cleanup Activities on the Banks of the Ida River

Forty people—comprising employees, of the Toyama Technology & Manufacturing Center and Group companies as well as family members—participated in the Ida Riverbank Cleanup Campaign on June 4, 2022 organized by the Yatsuo/Yasuuchi District Community Development Association. This was the first participation in the cleanup after a two-year gap due to the COVID-19 pandemic.



It was pleasant doing the cleanup in the refreshing early morning air.

Through these activities, we are raising employees' awareness of the importance of community contributions that help thrive in harmony with the local environment and people.

#### TABLE FOR TWO Activities

In endorsement of the activities of the non-profit organization TABLE FOR TWO International, the Toyama Technology & Manufacturing Center offers a different TFT menu each day at its canteen, Mountain View Cafeteria. A donation of 20 yen is raised for each TFT meal bought to provide school meals for children in developing countries. Items on the TFT menu are healthy, low-calorie, and well-balanced, so employees understand that it contributes both to eliminating hunger in developing countries and obesity in developed countries.

As part of the TFT program, the Company has also installed a total of seven beverage vending machines in the Group's premises such as its head office and the Toyama Technology & Manufacturing Center.

These efforts in 2021 led to the Company's recent certification as a 2022 Silver Partner.



## Community Contribution Activities and Efforts to Coexist with Local Communities

## Pink Ribbon & Gold Ribbon Vending Machines

In support of Pink Ribbon activities to raise awareness of the importance of early detection, diagnosis, and treatment of breast cancer, and Gold Ribbon activities to raise awareness on supporting and promoting understanding of childhood cancer, the Toyama Technology & Manufacturing Center has installed several charity vending machines. When someone buys a drink from one of these machines, a portion of the money goes to the JAPAN CANCER SOCIETY's "Hohoemi Fund" to eradicate breast cancer and the NPO Gold Ribbon Network. We hope that this initiative helps save someone from grief and suffering.



## Rainforest Alliance Certified Coffee

The Toyama Technology & Manufacturing Center serves coffee made with 100% coffee beans that have been produced by Rainforest Alliance\* certified farms at its canteen in partnership with AIM SERVICES CO., LTD., which operates the canteen.

By considering our impact on the environment and human rights, we will contribute to achieving a sustainable society.



\*The Rainforest Alliance is an organization that carries out activities to preserve wildlife and protects the rights and social circumstances of workers and communities in forest regions by certifying agricultural businesses to protect the world's forests. Through the Rainforest Alliance certification program, we also work to achieve SDGs.

## Introduction of Environmental Activities to Junior High School Students

In August 2021, the Company made a presentation on environmental initiatives of the Toyama Technology & Manufacturing Center to students attending Mito Eiko Junior High School of Midorigaoka Gakuen to deepen their understanding.

The students were given an assignment: working as three-person teams, they researched companies' SDGs initiatives, documented their findings, and prepared presentations. We explained the center's environmental initiatives, including energy conservation initiatives and reductions of energy used in transportation and waste, using illustrations and photos, and citing the points we thought out for improvement. The students eagerly asked questions.

We will continue to actively engage in activities to increase the interest of the children who will lead the next generation.

## Donating Seedlings for Green Curtains to Local Nursery and Childcare Facilities

As part of CSR activities for local communities, the Toyama Technology & Manufacturing Center donated seedlings for "green curtains" to local nursery and childcare facilities. As the seedlings of bitter gourds grow, they form green curtains that block direct sunlight from entering through the windows, thus suppressing the rise in indoor temperature. When donating the seedlings, we provided an outdoor class on the environment using a picture-story show about bitter gourds, which was created by the center's staff. We have been conducting this project since 2011 and plan to continue it as part of our CSR activities for local communities.



## Support for Holding a Workshop for Children

Kokusai Semiconductor Europe GmbH (Germany) supported the holding of a workshop for local children on Action Day Erkrath, September 3, 2021, which is a social contribution activity and in which eight employees from its Erkrath office participated.

The workshop included a new program called "Skill-Labs," which aims to develop children's ability to create something on their own, using wood and clay, as well as drawing.

The employee participants created a workshop space consisting of a workbench and a storage area for tools to ensure the program's success.

They also worked to create a comfortable space that nurtures children's creativity by repainting the building's balcony and planting flowerbeds.

This activity has been well received by the community and people in Erkrath. The employees are delighted with the response of the children who have used the new workshop.

## Strengthening of the Governance System to Realize Sustainability Management

### Building a strong and flexible foundation for sustainability management

By pursuing enhancement of corporate value through business activities and ESG initiatives, our sustainability management aims to contribute to achievement of the SDGs while seeking to realize a safe, comfortable, vibrant and sustainable society as well as sustainable development of the Group.

To achieve sustainability management, we have established a robust governance structure to ensure sustainable development of the Group without compromising the Group's corporate value and aim to remain a clean enterprise that earns the trust of society.

#### Basic Approach to Corporate Governance

The Company has selected to be a company with an audit and supervisory committee for the purpose of further enhancing the Board of Directors' supervision of executive officers and to improve corporate governance. We aim to separate management and execution with the appointment of multiple outside directors who are not themselves involved in business execution. The Board of Directors supervises overall management through decision-making on important business execution, including the election of executive officers, while the Audit and Supervisory Committee conducts lawful and suitable audits of the management and execution, which is thought to enable the realization of sustained improvement in corporate value. Since the seventh term (from April 1, 2021 to March 31, 2022), we have been analyzing and evaluating the effectiveness of the Board of Directors in order to improve its functions in line with the Corporate Governance Code. Based on the results of the evaluation of the effectiveness of the Board of Directors, we will continue efforts to maintain and improve the effectiveness of the Board of Directors. In addition, the Company has voluntarily established as consultation organizations for the Board of Directors, the Nomination and Compensation Committee, which clarifies the policies concerning executive personnel matters and compensation and to ensure transparency in the decision-making process, and the Transactions with Controlling Shareholders Committee, which deliberates on important transactions and behavior where there is conflict of interest between controlling shareholders and minority shareholders.

#### Board of Directors

The Board of Directors comprises ten Directors: Fumiyuki Kanai (Representative Director, President and Chief Executive Officer) as chair, with Yuji Kamiya (Director, Executive Vice President and Executive Officer), Unryu Ogawa (Director, Executive Vice President and Executive Officer), Masaki Nakamura (Director), Noriko Sakai (Outside Director), Masaaki Tsuruta (Outside Director), Hirofumi Hirano (Outside Director), Toshiyuki Uchino (Audit and Supervisory Committee Member), Hitoshi Kumagai (Audit and Supervisory Committee Member, Outside Director), and Hirohito Nakada (Audit and Supervisory Committee Member, Outside Director). In principle, the Board of Directors meets once a month and at other times as necessary. The Board of Directors deliberates and determines matters prescribed by laws and the articles of incorporation as well as important matters concerning business execution, and also supervises overall management, including the execution of duties by executive officers. To ensure decision-making from a wide-ranging viewpoint and the objective supervision of business execution, five of the ten directors on the Board of Directors are Outside Directors.

#### Audit and Supervisory Committee

The Audit and Supervisory Committee comprises three Directors who are Audit and Supervisory Committee Members (of which two are Outside Directors) including full-time member Toshiyuki Uchino (Director) as chair, and Hitoshi Kumagai (Outside Director) and Hirohito Nakada (Outside Director). In principle, the Audit and Supervisory Committee meets once a month and at other times as necessary. The Audit and Supervisory Committee, comprised of these Directors who are Audit and Supervisory Committee Members, cooperates with the Independent Auditor and the Audit Office and strives to ensure the integrity of management.

#### Executive Officer System and Management Meeting

The Company has introduced an executive officer system and the Representative Director, President and Chief Executive Officer controls the operations as the chief person responsible for business execution. The Management Meeting comprises the Representative Director, President and Chief Executive Officer as chair and all executive officers. In principle, the Management Meeting meets twice a month. The Management Meeting deliberates and determines important matters concerning business execution other than matters to be resolved by the Board of Directors as prescribed by laws and the articles of incorporation or otherwise.



## Strengthening of the Governance System to Realize Sustainability Management

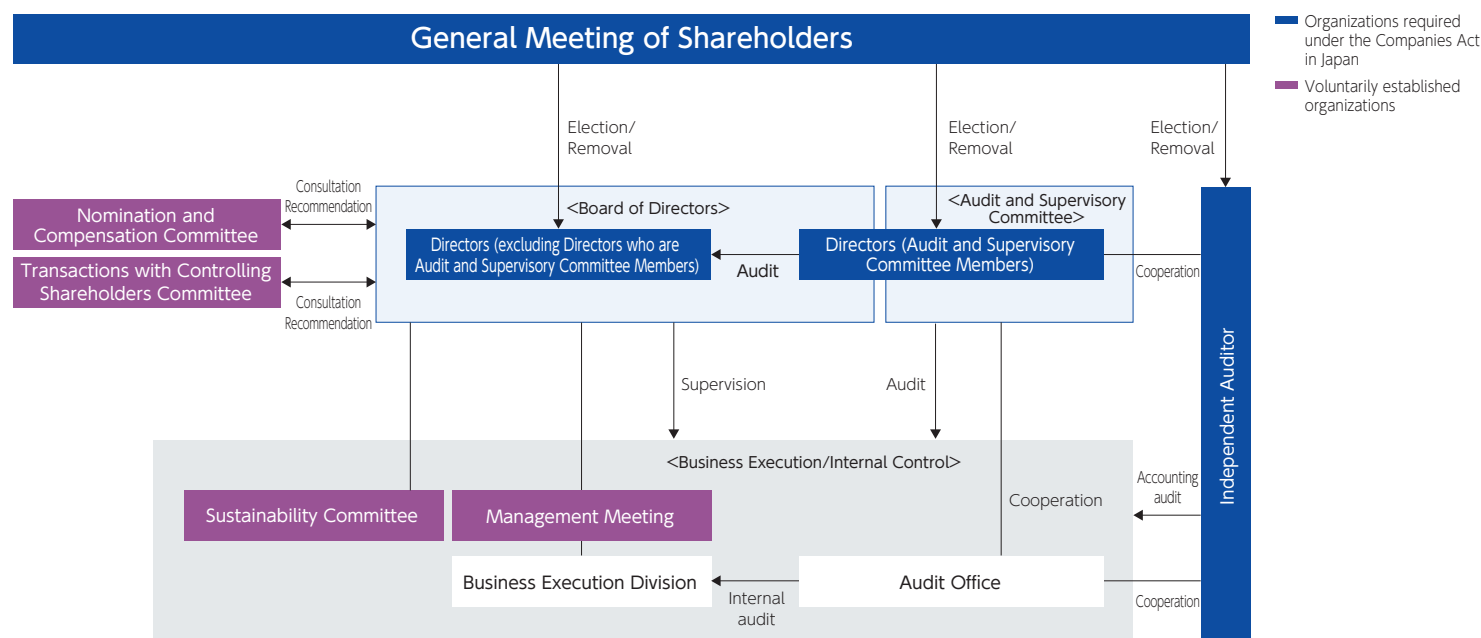
## Outside Directors/Independent Directors

The Company's Board of Directors comprises ten Directors including one female Director, of whom five Directors have extensive experience and advanced expertise as well as being knowledgeable about semiconductor-related businesses, and five Directors are Outside Directors, including Independent Directors who support and supervise management from an objective standpoint.

Outside Director Hirofumi Hirano has been involved in investment proposals and alliance business in multiple business areas over many years, and he has contributed his opinions and suggestions on expansion of the Company's business areas. Four Directors meet the independence criteria of the Companies Act, the Regulation for Enforcement of the Companies Act and the Tokyo Stock Exchange. These are Independent Directors Noriko Sakai (Lawyer), Masaaki Tsuruta (former Representative Director of Samsung Japan Corporation) and Audit and Supervisory Committee Members Hitoshi Kumagai (Certified Public Accountant) and Hirohito Nakada (Lawyer). They provide honest and lively constructive opinions at the Board of Directors based on their respective extensive knowledge and experience in various fields such as in corporate management from a fair and neutral standpoint. They fulfill their role and obligations as Independent Directors.

## Nomination and Compensation Committee

The Company voluntarily established the Nomination and Compensation Committee in June 2021 to clarify the Company's policy on executive assignment and compensation and to ensure transparency of the decision-making process. The committee is chaired by an Outside Director and consists of three Outside Directors and two Internal Directors for a total of five members. Regarding nomination, the committee deliberates on the basic policy on nomination of candidates for Representative Directors, Directors, and executive officers (hereinafter "Executives of the Company", as well as the details of the proposals for their appointment and dismissal. Regarding compensation, the committee deliberates on the policy on determination of the details of compensation etc. for individual Executives of the Company (excluding Directors who are Audit and Supervisory Committee Members), as well as on the details thereof. The results of deliberations by the Nomination and Compensation Committee are reported to the Board of Directors, which makes the final decision. In fiscal 2021, the committee met four times, and all committee members, including Outside Directors, attended all meetings.



## Strengthening of the Governance System to Realize Sustainability Management

## Internal Controls

The Company is aiming to maintain and enhance the Group's internal control system by establishing the Basic Policy on Internal Control Systems, improving the internal control system to ensure appropriate and efficient execution of the Group's operations, while also establishing an Internal Control Committee (which convenes twice a year) chaired by an executive officer responsible for finance and accounting.

The Audit Office was established under the direct control of the President on January 18, 2021. It conducts internal audits of all departments including subsidiaries in Japan and overseas and evaluates matters such as the effectiveness of management and operations, compliance, and the reliability of financial reports from a standpoint that is independent from business execution. The results of the audit are reported to the President, with regular exchange of opinions with the Audit and Supervisory Committee and the external auditors. We strive to increase the effectiveness of monitoring activities in the respective roles.

## Compliance

The Group recognizes as its approach to compliance that ensuring compliance with laws and regulations and the Articles of Incorporation is mandatory and indispensable. Accordingly, we are demonstrating our commitment to acting properly in light of corporate ethics as an enterprise and as individuals that earn the trust of society.

The Group considers compliance initiatives as an important measure and has established the Basic Rules for Compliance and the Compliance Committee Rules, as well as the Compliance Committee, in accordance with these rules.

The Compliance Committee is responsible for monitoring various types of compliance related to the Company's business and discussing and implementing policies and measures, such as training programs for compliance. The activities of the Compliance Committee are regularly reported to the Board of Directors, and advice received from the Board of Directors is reflected in subsequent activities.

## Risk Management

As well as reviewing the impact of each identified risk on business continuity and the effectiveness of countermeasures, we conduct regular risk assessments in all departments to identify new risks that may arise as social situations and the business environment change. The results of risk assessments are discussed by the Sustainability Committee, which reports its findings to the Board of Directors. We are continuously striving to strengthen risk countermeasures and business continuity plans to ensure that they are thorough.

### Major risks and countermeasures

No.	Risk classification	Possible situation	Initiatives for risks
1	Politics and economy	Restrictions on business activities due to the impact of policies of countries and regions on economy, industry, security, etc.	<ul style="list-style-type: none"> <li>Monitoring of information on policies of countries and regions</li> <li>Alternative measures for sales, production, import/export, services, etc., to ensure preparedness for various possible restrictions</li> <li>Prior consideration of division of labor</li> </ul>
2	Pandemics	Stagnation of business activities due to clusters of infections within the Company, travel restrictions to other countries and regions, etc.	<ul style="list-style-type: none"> <li>Operation of a countermeasure council chaired by the President</li> <li>Thorough implementation of infection prevention measures at each business site</li> <li>Consideration of alternative measures to ensure preparedness for possible restrictions on business activities</li> </ul>
3	Market needs	Long-term market stagnation or poor financial performance of the Company due to inability to keep up with rapid changes (increase or decrease) in demand	<ul style="list-style-type: none"> <li>Identification of market and customer trends</li> <li>Periodic review and consideration of countermeasures at executive meetings, etc.</li> </ul>
4	Products and quality	Failures of customers' products due to defects of the Company's products; deterioration of trust due to occurrence of safety or environmental incidents	<ul style="list-style-type: none"> <li>Investigation of causes of defects and thorough implementation of activities to prevent recurrence</li> <li>Promotion of product safety design and product quality improvement measures</li> </ul>
5	Intellectual property	<ul style="list-style-type: none"> <li>Infringement of the Group's intellectual property rights by third parties</li> <li>Infringement of intellectual property rights of third parties</li> </ul>	Collaboration among various departments led by the intellectual property strategy department and with external experts and responses
6	Response to environmental issues	<ul style="list-style-type: none"> <li>Deterioration of social credibility due to occurrence of environmental contamination incidents</li> <li>Stagnation due to inadequate compliance with environmental laws and regulations of countries and regions</li> </ul>	<ul style="list-style-type: none"> <li>Thorough management, inspection, etc. based on ISO 14001</li> <li>Grasping of laws, regulations, and ordinances of countries and regions</li> </ul>
7	Procurement and production	Stagnation of production activities and delivery delays, cancellation of orders received, etc. due to delays or stoppages of the supply of procured parts	Preparation of alternative measures by strengthening daily collaboration with customers and business partners; shift to procurement from multiple vendors
8	R&D	Decline in product competitiveness and poor financial performance due to inability to lead or keep up with competition in technological development	<ul style="list-style-type: none"> <li>Aggressive and effective R&amp;D investment</li> <li>Promotion of joint research with external research institutions</li> </ul>
9	Compliance	Administrative penalties due to non-compliance with laws and regulations of countries and regions, need to pay compensation for damage, and deterioration of reputation and trust in society	Regular monitoring by the Compliance Committee and internal audits, etc.; establishment of points of contact for consultation with external experts
10	Human resources	Stagnation in securing and developing human resources; decline in competitiveness due to outflow (retirement) of excellent human resources	<ul style="list-style-type: none"> <li>Promotion of creation of safe and comfortable workplaces and health &amp; productivity management</li> <li>Expansion of in-house training programs</li> </ul>
11	Large-scale disaster	Stagnation of production and parts supply due to damage to the Group's production sites and business partners	<ul style="list-style-type: none"> <li>Formulation of production BCP and a manual for large-scale disaster countermeasures</li> <li>Establishment of alternative production systems and strengthening of collaboration with suppliers</li> </ul>
12	Information security	System shutdown and information leakage due to cyber-attacks and unauthorized access, resulting in business stagnation and deterioration of social credibility	Continuous improvement led by the Information Security Committee in terms of both employee awareness and countermeasures for systems

## Strengthening of the Governance System to Realize Sustainability Management

## Collaboration with Stakeholders

The Group promotes positive “Tai-wa” with all stakeholders, including customers, builds relationships based on mutual trust, and engages them in value creation to the greatest extent possible even during the COVID-19 pandemic.

### “Tai-wa” with stakeholders (examples)

Stakeholders	Our commitment to stakeholders	“Tai-wa” and departments in charge (examples)	
Customers	Create value to contribute to the resolution of social issues jointly with customers	Technology exchange meetings, joint development projects, customer satisfaction surveys, various negotiations and meetings	Sales departments, design/development departments, field engineering departments, quality assurance departments
Employees	Give opportunities for further training and growth and provide a mentally and physically rewarding, safe and healthy work environment	Various training, labor-management conference, occupational health and safety committee, employee survey, stress check, health guidance, internal communication, awareness raising	Human resources and corporate administration departments, public relations & IR departments
Business partners	Engage in fair and free competition, appropriate business transactions that are legally compliant and consistent with social norms, and responsible procurement activities	Business partner meetings, various business negotiations and meetings	Procurement departments
Communities	Engage in communities proactively to contribute to their development	Support for maintaining and developing traditional arts, participation in volunteering activities, sponsorship of professional soccer team, direct exchanges with local residents and companies in the neighborhood	CSR departments, human resources and corporate administration departments, environmental management departments
Shareholders/Investors	Engage in constructive “Tai-wa” with stakeholders based on vigorous dissemination of information and share their views in the company for the creation and expansion of corporate value	Dissemination of information and response to inquiries through the website etc.; response to interviews with institutional investors, securities firms, and the press; General Meeting of Shareholders	Legal departments, finance & accounting departments, public relations & IR departments
Relevant organizations of which the Company is a member	Collaborate with various organizations and continue our efforts to resolve issues related to human rights, labor, the environment, anti-corruption, and business	Vigorous participation in events organized by the organizations of which the Company is a member; disclosure of information on our initiatives through the website, corporate report, and other media	CSR departments, environmental management departments, business planning departments

## Messages from Outside Directors

### Enhancing the effectiveness of corporate governance and contributing to the long-term enhancement of corporate value

Since assuming office as an Outside Director (Audit and Supervisory Committee Member), I have recognized that the current value of the Company, which is positioned as one of the world's leading manufacturers of semiconductor manufacturing equipment, is based on the high level of trust it has earned from the market through its solid technological capabilities and its emphasis on “Tai-wa”. I will continue engaging in “Tai-wa” with business execution divisions, etc. in order to gain a deeper understanding of the Company's operations that will facilitate constructive discussion. It has become even more difficult to predict the future due to the COVID-19 pandemic and other factors. Key issues requiring consideration include the vision of sustainable business and business portfolio management based on the cost of capital. There is also the need for a sharper focus on strengthening and improving the efficiency of internal control and governance, which are the foundation of the business. I will contribute to enhancement of the Company's corporate value by leveraging my practical experience as an expert in accounting and corporate finance and by fulfilling the role expected of an Outside Director of a global company.

**Hitoshi Kumagai**

Outside Director (Audit and Supervisory Committee Member)

### Striving to supervise execution of business by utilizing my knowledge, experience, and sense of balance

I have been a member of the Company's Board of Directors and the Audit and Supervisory Committee since my appointment as an Outside Director in 2021. My impression is that the atmosphere in the Company between the executive Directors and Outside Directors is characterized by openness and that active discussions take place. The Company has strengthened its governance structure through the transition to a company with an audit and supervisory committee and the establishment and reorganization of voluntary committees. However, establishing systems is meaningful only if it leads to positive results, and it is necessary to change accordingly if there is change in the social or legal environment. Furthermore, it is also extremely important that systems in place can respond appropriately when unexpected situations arise.

In order to meet these needs as much as possible, I would like to contribute to supervision of the appropriateness of business execution by making recommendations based on the knowledge and experience I have gained in my career of nearly 20 years as an attorney specializing in corporate legal affairs, especially my experience with legal affairs in the semiconductor industry and my knowledge in the field of intellectual property rights, which I have been focusing on, and by using my sense of balance as an attorney.

**Hirohito Nakada**

Outside Director (Audit and Supervisory Committee Member)



## Strengthening of the Governance System to Realize Sustainability Management

## Executives

### Directors (Excluding Directors who are Audit and Supervisory Committee Members)



**Fumiyuki Kanai**

Representative Director

#### Career Summary

**April 1981** Hitachi, Ltd.  
**April 2003** Renesas Technology Corp. (Now, Renesas Electronics Corporation)  
**April 2016** Senior Vice President and Executive Officer and General Manager, Semiconductor Process Engineering Division, Hitachi Kokusai Electric Inc.  
**June 2018** Representative Director, President and Chief Executive Officer, the Company (Current position)



**Yuji Kamiya**

Director

#### Career Summary

**April 1981** Hitachi, Ltd.  
**June 2015** Executive Officer and General Manager of Finance & Accounting Division, Hitachi Kokusai Electric Inc.  
**June 2018** Director, Executive Vice President and Executive Officer, the Company (Current position)



**Unryu Ogawa**

Director

#### Career Summary

**April 1997** Kokusai Electric Co., Ltd. (Now, Hitachi Kokusai Electric Inc.)  
**April 2016** Executive Officer and Deputy General Manager, Semiconductor Process Engineering Division, Hitachi Kokusai Electric Inc.  
**June 2018** Senior Vice President and Executive Officer, the Company  
**April 2021** Executive Vice President and Executive Officer, the Company  
**June 2022** Director, Executive Vice President and Executive Officer, the Company (Current position)



**Masaki Nakamura**

Director

#### Career Summary

**April 2010** McKinsey & Company  
**February 2014** KKR Capstone Japan Limited  
**February 2017** Director, HKE Holdings LLC  
**December 2017** Director, HKE Holdings Co., Ltd. (Now, the Company) (Current position)  
**January 2021** Director, KKR Japan Limited (Current position)



**Noriko Sakai**

Outside Director

#### Career Summary

**April 1997** Nagashima & Ohno (Now, Nagashima Ohno & Tsunematsu)  
**December 2005** O'Melveny & Myers gaikokuho kyodojigyo horitsujimusho  
**February 2008** Partner, O'Melveny & Myers gaikokuho kyodojigyo horitsujimusho  
**January 2017** Partner, Hiramawa International Law Office (Current position)  
**March 2021** Outside Director, the Company (Current position)



**Masaaki Tsuruta**

Outside Director

#### Career Summary

**April 1979** Sony Corporation  
**January 2013** Representative Director, Samsung Japan Corporation  
**January 2019** Representative Director and President, Future Domain Co., Ltd. (Current position)  
**June 2021** Outside Director, the Company (Current position)



**Hirofumi Hirano**

Outside Director

#### Career Summary

**April 1983** The Nikko Securities Co., Ltd.  
**January 2010** Japan Representative, AlixPartners Asia LLC  
**April 2013** Chief Executive Officer, KKR Japan Limited (Current position)  
**March 2021** Outside Director, the Company (Current position)  
**April 2022** Part-time Director, KJR Management (Current position)



**Toshiyuki Uchino**

Director (Full-time Audit and Supervisory Committee Member)

#### Career Summary

**April 1984** Hitachi, Ltd.  
**April 2003** Renesas Technology Corp. (Now, Renesas Electronics Corporation)  
**June 2018** Corporate Officer, General Manager - Global Services Unit, the Company  
**January 2021** Corporate Auditor, the Company  
**June 2021** Director (Full-time Audit and Supervisory Committee Member), the Company (Current position)



**Hitoshi Kumagai**

Outside Director (Audit and Supervisory Committee Member)

#### Career Summary

**December 1997** New York Office, KPMG Peat Marwick LLP (Now, KPMG LLP)  
**October 2002** KPMG FAS Co., Ltd.  
**October 2006** Representative Director, Integrated Advisory Co., Ltd. (Now, Trustees FAS Co., Ltd.) (Current position)  
**January 2021** Outside Corporate Auditor, the Company  
**June 2021** Outside Director (Audit and Supervisory Committee Member), the Company (Current position)



**Hirohito Nakada**

Outside Director (Audit and Supervisory Committee Member)

#### Career Summary

**December 2001** Nagashima Ohno & Tsunematsu  
**September 2007** Kirkland & Ellis LLP (Chicago)  
**February 2014** Co-founder and partner, Shibata, Suzuki & Nakada (Current position)  
**March 2021** Outside Corporate Auditor, the Company  
**June 2021** Outside Director (Audit and Supervisory Committee Member), the Company (Current position)

### Directors who are Audit and Supervisory Committee Members

## Strengthening of the Governance System to Realize Sustainability Management

## Executive Officers

## Hidehiro Yanagawa

Senior Vice President and Executive Officer

## Career Summary

**April 1988** Kokusai Electric Co., Ltd. (Now, Hitachi Kokusai Electric Inc.)

**April 2018** Executive Officer and General Manager - Volume Manufacturing & Engineering Unit, Semiconductor Process Engineering Division, Hitachi Kokusai Electric Inc.

**June 2018** Corporate Vice President and Executive Officer, General Manager - Volume Manufacturing & Engineering Unit, the Company

**April 2021** Senior Vice President and Executive Officer, the Company (Current position)

## Kazunori Tsukada

Senior Vice President and Executive Officer

## Career Summary

**April 1986** Kokusai Electric Co., Ltd. (Now, Hitachi Kokusai Electric Inc.)

**June 2018** Corporate Officer, General Manager, Sales Division, the Company

**April 2019** Corporate Vice President and Executive Officer, General Manager, Sales Division, the Company

**April 2022** Senior Vice President and Executive Officer, the Company (Current position)

## Masayuki Yamada

Senior Vice President and Executive Officer

## Career Summary

**April 1983** Kokusai Electric Co., Ltd. (Now, Hitachi Kokusai Electric Inc.)

**June 2018** Corporate Officer, General Manager, Production Division, Volume Manufacturing & Engineering Unit, the Company

**April 2021** Corporate Vice President and Executive Officer, General Manager, Production Division, the Company

**April 2022** Senior Vice President and Executive Officer; General Manager, Production Division; General Manager, Toyama Technology & Manufacturing Center, the Company (Current position)

## Yoshitaka Kawakami

Corporate Vice President and Executive Officer

## Career Summary

**November 1988** Kokusai Electric Co., Ltd. (Now, Hitachi Kokusai Electric Inc.)

**June 2018** General Manager, Finance & Accounting Department, Corporate Management Division, the Company

**April 2022** Corporate Vice President and Executive Officer, General Manager, Finance & Accounting Division, the Company (Current position)

## Kenji Kanayama

Corporate Vice President and Executive Officer

## Career Summary

**November 1991** Kokusai Electric Co., Ltd. (Now, Hitachi Kokusai Electric Inc.)

**June 2018** Corporate Officer, General Manager, Technology Development Division, Strategic Business Development Unit, the Company

**April 2022** Corporate Vice President and Executive Officer, General Manager, Process Development Division, the Company (Current position)

## Naotoshi Yamamine

Corporate Vice President and Executive Officer

## Career Summary

**April 1990** Kokusai Electric Co., Ltd. (Now, Hitachi Kokusai Electric Inc.)

**June 2018** General Manager, Strategic Service Business Development Division, Global Services Unit, the Company

**April 2022** Corporate Vice President and Executive Officer, General Manager, Global Services Division, the Company (Current position)

## Skills Matrix

		Directors							Directors (Audit and Supervisory Committee Members)			Executive Officers					
		Fumiyuki Kanai	Yuji Kamiya	Unryu Ogawa	Masaki Nakamura	Noriko Sakai Outside Independent	Masaaki Tsuruta Outside Independent	Hirofumi Hirano Outside	Toshiyuki Uchino	Hitoshi Kumagai Outside Independent	Hirohito Nakada Outside Independent	Hidehiro Yanagawa	Kazunori Tsukada	Masayuki Yamada	Yoshitaka Kawakami	Kenji Kanayama	Naotoshi Yamamine
Enhancement of corporate value	Corporate management	●	●	●	●		●	●		●		●	●				
	Finance/accounting		●		●			●		●					●		
	Internal control/corporate governance	●	●		●	●	●	●	●	●	●				●		●
	Legal affairs/risk management		●			●					●						
	Human resources	●	●														
Company's sustainable growth	Knowledge of the semiconductor industry	●	●	●	●		●	●	●		●	●	●	●	●	●	●
	R&D/design	●		●			●		●			●		●		●	
	Global	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Business strategy	●					●		●			●					
	Service strategy	●							●			●					●
Business promotion	Production/quality assurance/supply chain management	●							●			●		●			●
	Sales											●	●				
	DX/IT											●	●		●		

## Company Outline (as of March 31, 2022)

### Company Name

KOKUSAI ELECTRIC CORPORATION

### Address of Head Office

3-4 Kandakaji-cho, Chiyoda-ku, Tokyo  
101-0045, Japan

### Established

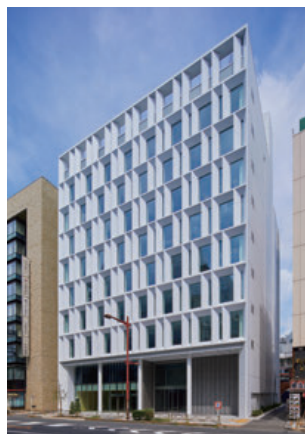
February 2, 2017

### Paid-in Capital

¥10 billion (as of March 31, 2022)

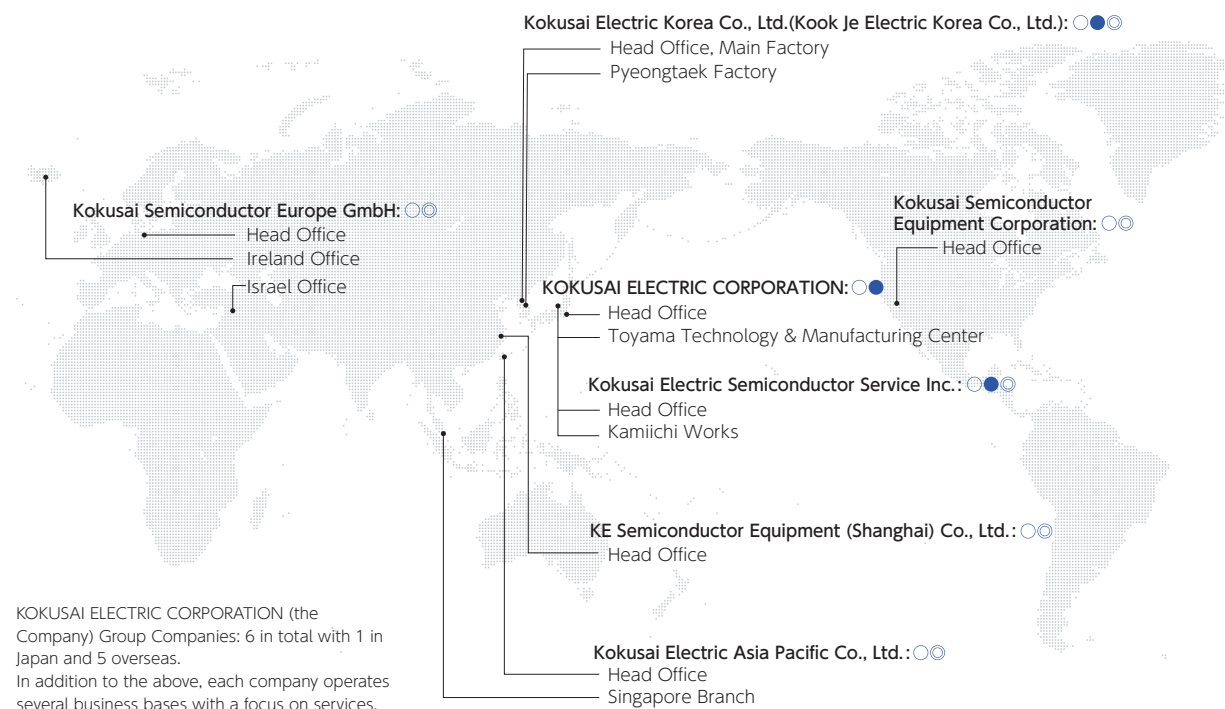
### Number of Employees (Consolidated)

2,245 (as of March 31, 2022)



## Group Network (as of April 1, 2021)

○ Head office, distribution ● Production ○ Service



**WEB** For more information on group companies such as details of business bases not shown on the map, see their individual websites.

Kokusai Electric Semiconductor Service Inc.  
<https://www.kokusai-electric.com/kss/global/>

Kokusai Electric Semiconductor Service Search

Kokusai Electric Korea Co., Ltd.  
(Kook Je Electric Korea Co., Ltd.)  
<https://www.kekorea.co.kr/eng/>

Kokusai Semiconductor Equipment Corporation  
<https://www.ksec.com/>

Kokusai Electric Asia Pacific Co., Ltd.  
<https://www.kap.com.tw/>

Kokusai Semiconductor Europe GmbH  
<https://kokusai-se.com>



# Glossary

## 1 Terms related to technology

Term	Explanation	Page
CVD	Abbreviation of Chemical Vapor Deposition	P.4
Batch deposition equipment	Equipment that performs film deposition by batch processing of a large number of wafers	P.8
Treatment equipment	Equipment that improves film properties after deposition by single-wafer processing	P.8

## 2 Terms related to products

Term	Explanation	Page
MARORA®	Name of a single wafer plasma nitridation/oxidation system. MARORA is a word coined from the modified magnetron type (MMT) plasma generation method and aurora, a plasma phenomenon that occurs in nature	P.11-12
QUIXACE®	Name of a vertical batch thermal processing system offering quick turnaround time (Q-TAT). QUIXACE employs comprehensively upgraded core technologies, including temperature control, wafer handling, replacement, cooling, and film forming.	P.11-12
QUIXACE ULTIMATE®	Platform with high productivity, energy-saving control, and improved process quality in view of the cost of ownership.	P.11-12
TSURUGI-C²®	Name of a short cycle batch cluster (SCBC) platform. Equipped with two furnaces for deposition of 25-50 wafers	P.11-12
TANDUO®	The successor to our Lambda series of single wafer dry resist strip systems. TANDUO is a word coined from "tandem" and "duo."	P.11-12
VERTEX®	Name of our systems for sub-200 mm wafers. Named "Vertex," meaning the highest point, expressing the wish that this series will sell well worldwide	P.11-12
ZESTONE®	Equipment for 300 mm wafers	P.11-12
AdvancedAce®	High-throughput equipment for thermal process	P.11-12

For details ➔ [Product information | https://www.kokusai-electric.com/en/products/](https://www.kokusai-electric.com/en/products/)

## 3 Terms related to Sustainability

Term	Explanation	Page
United Nations Global Compact (UNGC)	The UNGC is the world's largest corporate sustainability initiative, in which the United Nations and the private sector (companies and organizations) collaborate to build a sound global society. It is a voluntary initiative by companies and organizations, acting as good members of society, to achieve sustainable growth by demonstrating responsible leadership.	P.20
GHG Protocol	International standards for calculating and reporting greenhouse gas emissions	P.24
SVHC	Abbreviation of Substances of Very High Concern. Substances in the Candidate List for eventual inclusion in Annex XIV of the REACH regulation	P.24
chemSHERPA®	Common scheme for information handling for appropriate management of chemical substances in products in order to continuously respond to expanding regulations. chemSHERPA is a registered trademark of the Japan Environmental Management Association for Industry (JEMAI).	P.24
IPCC	Abbreviation of Intergovernmental Panel on Climate Change. Intergovernmental body that provides assessments by international experts of research findings on climate change in the scientific papers that it gathers.	P.25
eco people	Persons who passed the Certification Test for Environmental Specialists (Eco Test) of the Tokyo Chamber of Commerce and Industry	P.31

## Glossary

Term	Explanation	Page
TCFD	Abbreviation of Task Force on Climate-related Financial Disclosures. Framework for disclosure of financial information on companies' actions to mitigate climate change and their impacts	P.25
CDP	Formerly, the Carbon Disclosure Project, CDP is a non-governmental organization (NGO). CDP conducts questionnaire surveys of companies and municipalities on their actions regarding climate change, water resources, and deforestation, and publishes the scoring results.	P.25
SBT	Abbreviation of Science Based Targets (Science-based greenhouse gas emissions reduction targets). The Science Based Targets initiative (SBTi) assists companies in the setting of science-based greenhouse gas emissions reduction targets and their achievement with the aim of limiting global warming to well below 2°C above pre-industrial levels.	P.25
3R	Collective term for Reduce, Reuse, and Recycle. "Reduce" refers to reducing the amounts of resources used in production of products and generation of waste. "Reuse" refers to repeated use of used products and their parts. "Recycle" refers to effective use of waste, etc. as raw materials and energy sources.	P.26
Thermal recycling	Recycling method to recover and utilize the thermal energy generated when incinerating waste	P.26
Material recycling	Method to reuse waste as materials for new products	P.26
PRTR	Abbreviation of Pollutant Release and Transfer Register. The PRTR system requires businesses handling chemical substances potentially hazardous to human health and the ecosystem to monitor and report the amounts of chemical substances released into the environment and transferred in waste to the government, which then compiles the amounts released and transferred based on reports from businesses and estimates made using statistical data and makes the results public.	P.26
RBA Code of Conduct	Abbreviation of Responsible Business Alliance. A set of standards for the electronics industry and other industries to ensure throughout the supply chain that the working environment is safe, workers are treated with respect and dignity, the manufacturing process is responsible for its environmental impact, and so on.	P.28
BCP	Abbreviation of Business Continuity Plan. BCPs are plans that define how to minimize damage such as business interruption and achieve quick recovery and ensure business continuity in the event that business continuity is jeopardized, such as a large-scale natural disaster or an outbreak of infectious disease.	P.28
Conflict minerals	Tin, tantalum, tungsten, gold (collectively "3TG") as well as cobalt from the Democratic Republic of the Congo (DRC) and adjoining countries. Minerals that may be used to finance armed groups involved in civil wars and conflicts that cause major human rights abuses.	P.28
Certified Health & Productivity Management Outstanding Organizations Recognition Program	This program recognizes outstanding large enterprises and small and medium-sized enterprises implementing health & productivity management based on initiatives attuned to regional health issues and health-promoting initiatives of the Nippon Kenko Kaigi. The aim is to develop an environment in which such enterprises are able to gain enhanced recognition in society as enterprises strategically implementing initiatives that lead to maintenance and promotion of health of employees from a business management perspective.	P.32
TechInsights customer satisfaction survey	Questionnaire survey covering the chip market and subsystems customers. The survey participants were asked to rate equipment suppliers in 14 categories based on 3 key factors: supplier performance, customer service, and product performance.	P.38
TABLE FOR TWO Activities	Under this program, for each meal purchased in a developed country, a donation is made to provide one meal in a developing country. This program contributes both to eliminating hunger in developing countries and obesity in developed countries.	P.39
Rainforest Alliance	An organization that carries out activities to preserve wildlife and protects the rights and social circumstances of workers and communities in forest regions by certifying agricultural businesses to protect the world's forests.	P.40

**Technology & Tai-wa** for Tomorrow



## **KOKUSAI ELECTRIC CORPORATION**

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<https://www.kokusai-electric.com/en/>