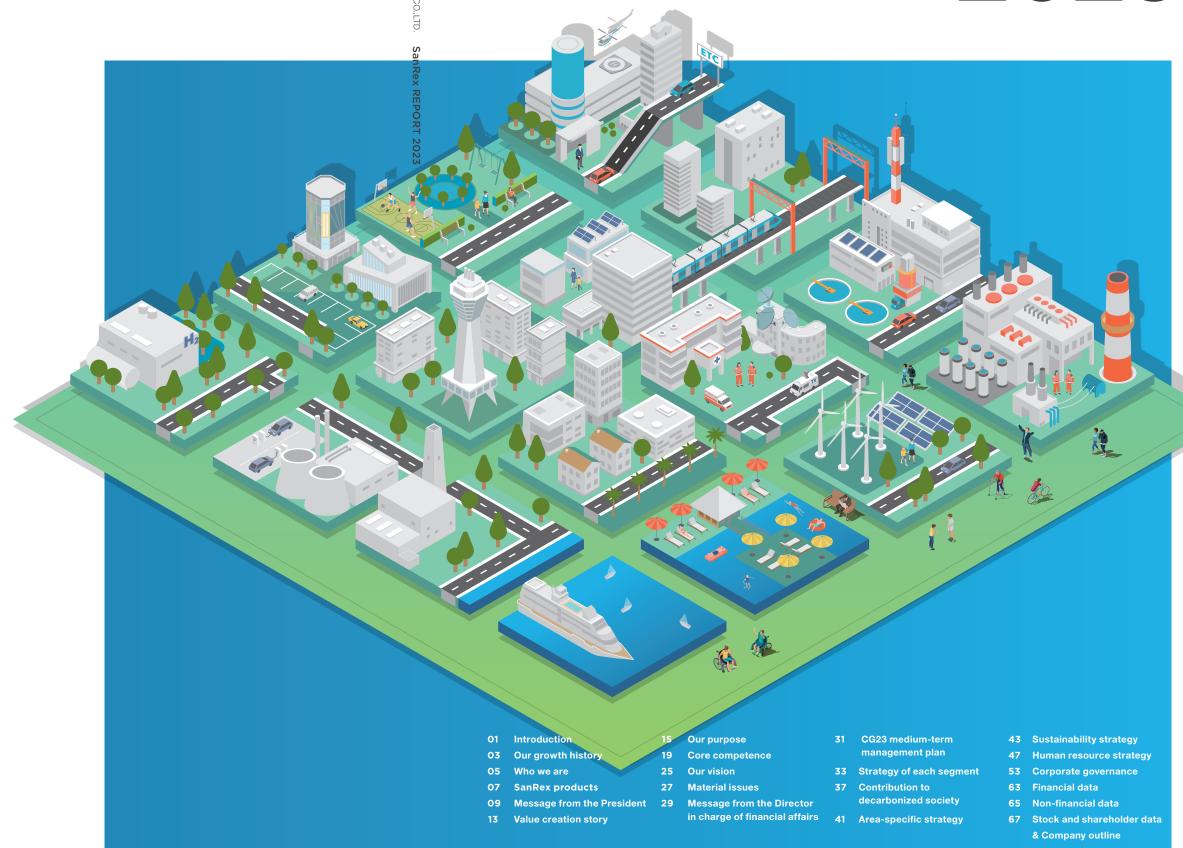
# SanRex REPORT 2023

# SANSHA ELECTRIC MFG. CO., LTD.

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https://www.sansha.co.jp/









# **Editorial policy**

The SanRex Report is published as a tool for communicating with our stakeholders.

The SanRex Report includes the Sansha Electric Manufacturing Group's business models, the growth strategy for achieving the Global Power Solution Partner vision and sustainability initiatives. It is edited to enable stakeholders to understand the Group's medium- to long-term value creation story.

The point we would like to emphasize in particular is that while the value creation story in the preceding fiscal years was focused mainly on solutions to social issues, we set corporate culture as its starting point this fiscal year.

It is believed that we are in an era of volatility, uncertainty, complexity and ambiguity (VUCA), that is, it is an uncertain time where it is difficult to predict the future. In this environment, companies must be flexible and able to respond promptly to change.

In this report, we introduce the Sansha Electric Manufacturing Group's stances and initiatives, which it uses to move forward with a clear purpose (aim) while confronting unforeseen situations, with empathy for the purpose being the unifying force. We hope that readers will understand and accept our values and goals.

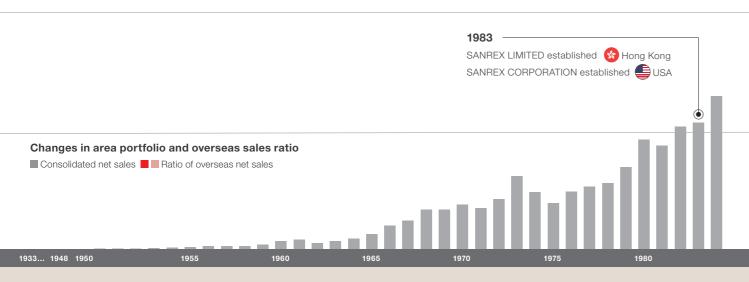
In compiling this report, we referred to the International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC), the Guidance for Integrated Corporate Disclosure and Company-Investor Dialogue for Collaborative Value Creation from the Ministry of Economy, Trade and Industry of Japan, and the GRI Sustainability Reporting Guidelines (Standards).

We would appreciate it if you give us your frank opinions, which will be helpful for us in responding to the voices of more stakeholders.

History of growth

# We will continue growing by operating businesses globally

Since its founding in 1933, the Sansha Electric Manufacturing Group has been contributing to the development of society through the creation of products that society needs. Nearly four decades have passed since we launched our first overseas bases in the United States and in Hong Kong in 1983. The Group will continue to operate its business globally.

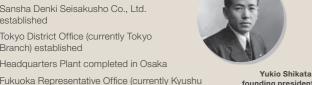


Establishing the technological foundation that continues from the foundation of the **Group to the present** 

1933 »» 1970

1933 | Sansha Denki Seisakusho founded 1948 Sansha Denki Seisakusho Co., Ltd. established 1953 Tokyo District Office (currently Tokyo Branch) established Headquarters Plant completed in Osaka

Sales Office) established



founding president President from the Group's

Increasing bases and specialization in the development of power semiconductors

1971 »» 1990

1982 | Shiga Plant completed in Shiga Prefecture for the production of power supplies

1985 Okayama Plant completed in Okayama Prefecture for the production of power semiconductors



second president

# 1991 »» 2010

1994

1994

in FY2009)

Germany

SANSHA ELECTRIC MFG.

(GUANGDONG) CO., LTD. established

SANREX EUROPE GMBH

established (relocated to Slovenia

1990

1994 | Shiga Plant obtains ISO 9001 certification 1996 Okayama Plant obtains ISO 9001 certification

nt plan Policy

Developing a system for increased globalization

Achieves listing on the second section of the Osaka Stock Exchange

Power Supply System Manufacturing Division obtains ISO 14001 certification

Semiconductor Manufacturing Division obtains 2002 ISO 14001 certification

| Develops a planner type transistor module

2007 Develops an IGBT chip for inverter for industrial use

Develops a power supply for light source for projector of

Develops a solar power conditioner

# Towards a new age

Brisk capital investment and ecord-high net sales

2008 Financial crisis

2019

ed in China, but demand declined due to trade friction between the U.S

the semiconductor business, sales of products with new applications

ibute to hydrogen society by providing fuel cell equipmen

Kunio Shikata

**Honorary Chairman** 

President and Chairman of

32.8%

1999

2000

18.0%

2007

SANREX ASIA PACIFIC

PTE. LTD. established

2001

CO., LTD.

China

established

SANSHA ELECTRIC

MFG. (SHANGHAI)

Singapore

# 1991 »» 2010

2020

2014 | New building completed at the Shiga

2009

FY2017)

Slovenia

Representative office

in Slovenia opened (relocated to Helsinki in

2016 SANSHA SOLUTION SERVICE CO., LTD. established in Osaka

SANSHA ELECTRIC EASTERN CO. LTD. (currently SUWA SANSHA FLECTRIC CO. LTD.) established in Nagano Prefecture to commence small power supply business

2021 | OSAKA DENSO INDUSTRY CO., LTD. becomes a wholly owned subsidiary

Change to Growth

(100 million ven)

100

2016

established

China

2017

Finland

South Korea

DONGGUAN EASTERN

ELECTRONICS CO., LTD.

Helsinki Branch established

Seoul Branch established

Taipei Branch established

2022

34.0%

Listing moves to the 2022 Standard Market of the Tokyo Stock Exchange

2023 Purpose established

2017 | Develops a fuel cell power

Develops a 1500 V string

compatible diode module

Develops a power supply

for storage battery tests

Develops 1200 V voltage

resistant SiC MOSFET

for photovoltaic power

conditioner

generation

Develops a choke coil auto transformer, a predecessor to projector power supplies

1937 Develops a tungar rectifier for light projectors



Tungar rectifiers for light projectors

1963 Develops and announces our first power semiconductor and

Develops an inverter uninterruptible power supply and an electric power regulator for electric furnaces Develops a diffusion type of triac and thyristor

**1970** Develops a rectifier for plating

1971 | Develops an insulated triac that is the first in Japan

Develops a thyristor module and a power transistor for high speed switching

1982 Develops a power transistor module 1988 Develops a power MOSFET module



Insulated triad





1993



digital cinema projector

2014 | Develops a photovoltaic power generation evaluation system for the National Institute of Advanced Industrial Science and Technology's Fukushima Renewable Energy Institute

2015 Jointly develops a compact SiC power module with Panasonic Corporation

> Participates in the virtual power plant (VPP) construction demonstration





MOSFET discrete semiconductor



# **Our Business**

The Sansha Electric Manufacturing Group consists of Sansha Electric Manufacturing Co., Ltd. and nine subsidiaries. Our business activities include the development, manufacturing and sale of semiconductor devices and power supplies and also the provision of services related to each business.

# **Power semiconductor** business Results for FY2022 Power modules/power discrete Net sales semiconductors/chips/other 28.0 billion yen Composition .6 billion yer Operating Composition

Power supply business

General industrial power supplies, power supplies for surface treatment, light sources and dimming, inverters, small embedded power supplies, and other power supplies

The Sansha Electric Manufacturing Group does not develop or manufacture integrated circuit semiconductors such as memory or microcomputers. Instead, it develops power semiconductors. These are used in many different kinds of power supplies for the conversion of high voltages or currents between direct current and alternating current, for controlling current and voltage and for other purposes. They are essential devices for improving power conversion efficiency and saving energy.

We utilize technologies that freely transform and efficiently convert electricity to develop and manufacture a wide variety of power supplies supporting the environmental and energy sectors, the infrastructure and facility equipment sectors and entertainment-related sectors. Using power semiconductors, they efficiently supply stable electric power for a wide variety of applications, including everything from high to low electric power.

# Strengths and features

- Independently developed power semiconductors with high voltage resistance, high current and low power loss characteristics
- Packaging technologies for high reliability
- Synergy with the power supply business



- High-efficiency power conversion technology
- Wide range of development from small custom-made to large industrial power supplies
- Integrated production including development, design and manufacturing



# Third largest share of the global market

of thyristor and diode modules

Omdia, Annual Power Semiconductor Reports - 2021

# Largest share of the domestic market

of power supplies for surface treatment

Estimated by Sansha Electric Manufacturing Co., Ltd. on the basis of the Japan Surface Finishing Suppliers Association: 2021 Dynamic Statistics of Power Supply Sales

# **Our Performance**

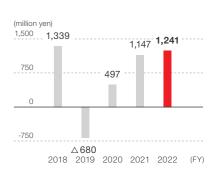
## Net sales

# (million ven) 30,000 28,088 24,369 22,675 21,875 19,436 20,000 10.000 2018 2019 2020 2021 2022

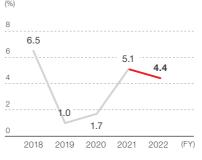
## Operating profit & ratio of operating profit



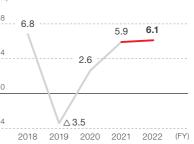
## Profit attributable to owners of parent



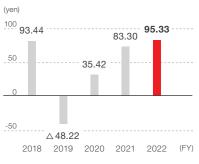
# ROA



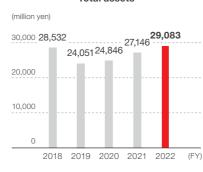
ROE



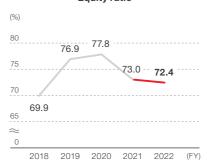
# Earnings per share

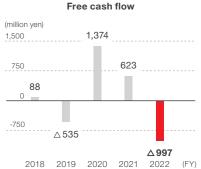


# Total assets



# **Equity ratio**





# COLUMN

# What does "transforming electricity flexibly and converting it efficiently" mean?

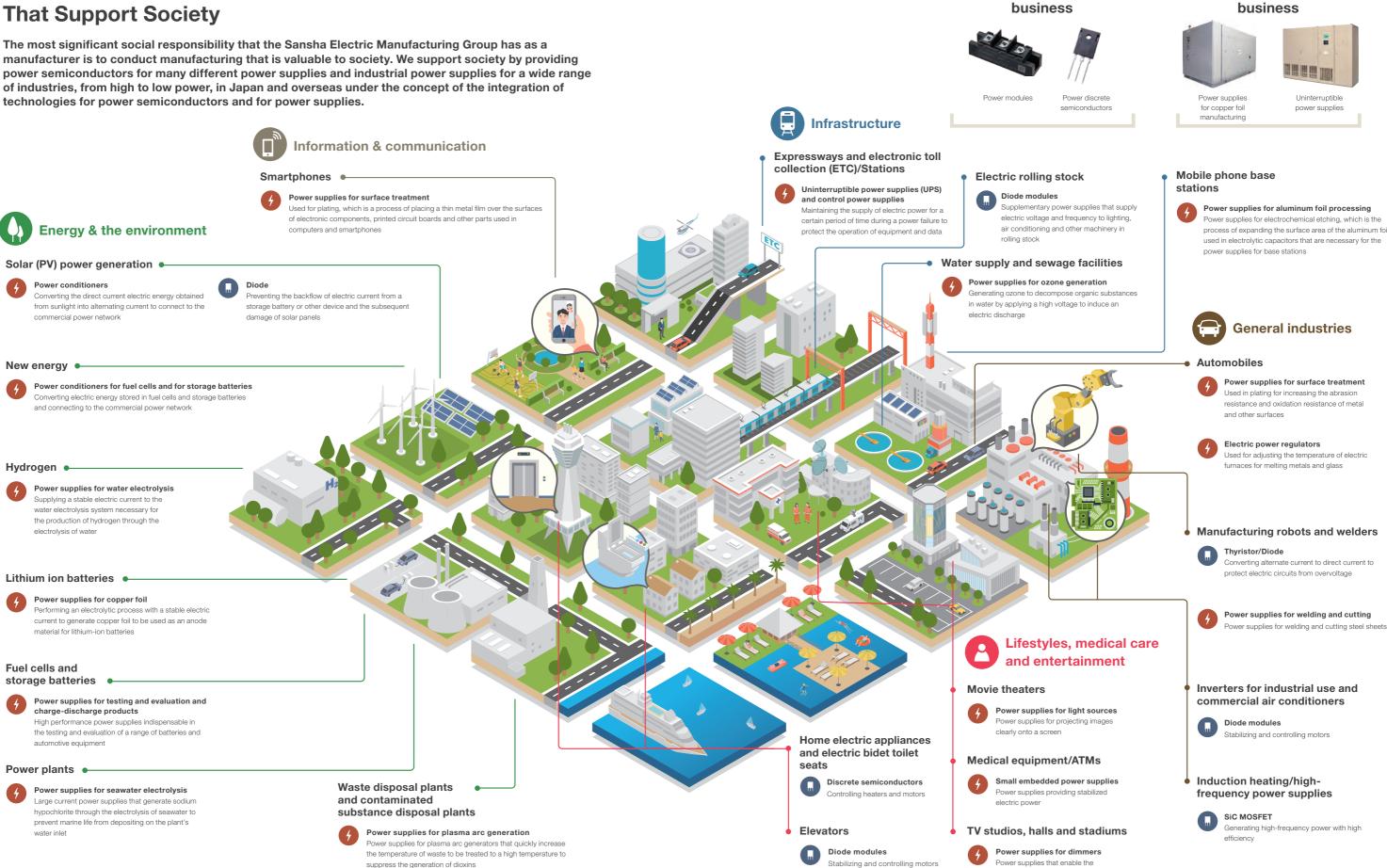
The electricity generated by power plants and other facilities cannot be used as it is. It must be transformed. There are roughly four different ways of transforming electricity. There is always a loss of electricity every time a power conversion occurs in the process from power generation at a power plant, through transmission lines and power supply circuits to the final operation of electric appliances by consumers. It is believed that improvements including the increase of conversion efficiency are necessary to reduce this power loss.

- Converting direct current electricity to alternating current
- Converting alternating current electricity to direct current
- Changing the frequency of alternative current electricity
- Changing the voltage of direct current or alternating current electricity



# **Products of the Sansha Electric MFG That Support Society**

manufacturer is to conduct manufacturing that is valuable to society. We support society by providing power semiconductors for many different power supplies and industrial power supplies for a wide range of industries, from high to low power, in Japan and overseas under the concept of the integration of



# **Power supply**

Power semiconductor

continuous dimming of lighting



Uninterruptible power supplies

Power supplies for aluminum foil processing

process of expanding the surface area of the aluminum foil used in electrolytic capacitors that are necessary for the

# **General industries**

Power supplies for surface treatment Used in plating for increasing the abrasion resistance and oxidation resistance of metal

> Jsed for adjusting the temperature of electric furnaces for melting metals and glass

# Manufacturing robots and welders

Converting alternate current to direct current to protect electric circuits from overvoltage

Power supplies for welding and cutting

# commercial air conditioners

# frequency power supplies

Generating high-frequency power with high

# **Message from the President**

We will proceed on the path to the future that we should follow with confidence.



# Confident in the path to the future that we should follow in the second year of the medium-term management plan

Two of the three years of our CG23 medium-term management plan have already passed. We started the plan with the slogan: Change to Growth. As in the first year, we were able to exceed the targets for all of the major financial indicators, net sales, operating profit, and ROE, in the second year.

In last year's integrated report, I stated, "CG23 is the first phase of our actions towards what we aspire to be like ten years from now. Results in the second year are significant in the sense of bringing some clarity to the future." Over the course of the year, we were able to become confident about the path to the future that we should follow. Specifically, this path is in the new energy sector.

There is an ongoing global trend toward the decarbonization of society, and both the power supply business and the power semiconductor business have received many inquiries from the new energy sector, and we have received orders

We expect this trend to continue for a

time and the sector is important from the viewpoint of sustainability and our role in society (the meaning of our existence). Therefore, want to use this opportunity to steadily produce results.

# Issues and countermeasures that have been highlighted

On the other hand, issues were also highlighted. This time, we exceeded quantifiable targets such as net sales and operating profit. However, we actually achieved them by biting off much more than we could chew. While materials and parts remained in short supply throughout the year, we managed to gather materials and parts from various guarters and people working on-site used their ingenuity and overcame the situation. We are still facing difficult conditions due to the COVID-19 pandemic and the Russian invasion of Ukraine. Naturally, the prices of materials and parts that are in short supply are rising. As one misfortune follows another, electricity expenses and other energy costs have soared.

We will take measures to overcome this situation, such as looking for new

suppliers including overseas suppliers and arranging for materials in advance in line with our production plans, aiming to ensure a stable supply of materials. We will also change designs to replace materials with materials we are able to procure, aiming for stable production.

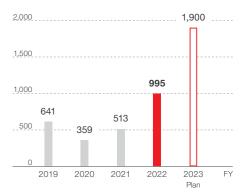
The other issue is the delays in our own investments in equipment.

In the fiscal year ended March 31. 2023, we planned to make capital investments of 2.1 billion yen. However, the equipment that was actually delivered was approx. 1.0 billion yen. As materials and parts are in short supply in our business activities, so is the equipment for which we have placed orders. We have remained in a state where equipment has not been delivered, even though we have placed orders for it in accordance with our investment plan. We invest in equipment for two major purposes. One is to increase our capacity to manufacture power semiconductors. The other is to automate our plants. The goal of automating our plants is to improve manufacturing efficiency and productivity, which improves profitability, while preparing for future labor shortages is also an objective.

# CG23: Quantifiable targets and results

	FY2	2021	FY2	022	FY2023		
	Plan	Results	Plan	Results	Plan	Forecast	
Net sales	21.8 billion yen	22.6 billion yen	24.0 billion yen	28.0 billion yen	26.0 billion yen	30.5 billion yen	
Operating profit	800 million yen	1.3 billion yen	1.3 billion yen	1.6 billion yen	1.9 billion yen	2.0 billion yen	
ROE	2.8%	5.9%	4.4%	6.1%	6.1%	6.5%	

# Actual and planned capital investment (in million yen)





AC Cafe, a place for employees to

# Taking on challenges to standardize designs

Unfortunately, I do not think that the problem of the delays in the delivery of manufacturing equipment will be solved quickly. While we will continue striving to improve the efficiency of our manufacturing processes. I think that we can do more in the design phase. In the power supply business in particular, I think we can improve productivity by devising creative measures in the design stage. While many of the power supplies we handle are large, we work to meet the needs of customers in the design phase. This measure itself is one of our strengths. Actually, however, it eventually places burdens on the manufacturing site, in the manufacturing processes. While various approaches are possible to improve this, I think that one of them is the standardization (formatting) of designs. For example, power supplies have many wires in them. While at present we do complex wiring for each customer, I presume that wiring can be standardized to a certain extent. While improving productivity and manufacturing efficiency through standardization will generate a positive impact in terms of quality improvement and profitability, it can also have positive effects from the perspective of sustainability. Specifically, it can help us tackle the climate change problem and in giving consideration to the environment. Because manufacturing companies have no choice but to use the earth's resources in our business activities, we must keep environmental considerations in mind in our activities.

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We understand that we have this large responsibility. Because I was an engineer, I understand that it is not easy to change the manufacturing approaches and methods of the company that have been applied for more than 90 years. Although it is not easy to make this a reality, we would like to take on the challenge of standardizing our designs as a mediumto long-term target for our activities in the next ten years.

# Aiming to focus on more overseas business markets toward our 100th anniversary

At the time that I am writing this for the integrated report, we are already in the final fiscal year of the CG23 mediumterm management plan. While we work to achieve the CG23 plan, we have begun discussing the next medium-term management plan. Our medium-term management plan is a three-year action plan. We formulate it based on our long-term vision, applying a backcasting approach. We have started by discussing what we aspire to be like ten years from now, setting our eyes on 2033, when we will celebrate our 100th anniversary. At present, our overseas business is focused mostly on China. We would like to focus on more overseas markets in the next ten years. The regions that we are paying attention to are India and Europe.

At present, our business in India is limited to transactions with Japanese companies. Moving forward, we would

like to expand this to local companies. This year, we will sow the seeds for the next ten years.

In Europe, we still receive many inquiries about our power semiconductor business. With the high interest in the green energy sector, Europe is a big market in which we see massive potential. We began to engage in activities to increase our visibility in Europe last year, such as running a booth at a hydrogen energy trade show. I think that area-specific strategies will be very important in thinking about the next ten years. We must make our strategies more muscular. In the next ten years, we aim to enhance our presence in the sector of new energy in India and Europe in addition to Japan and China as our existing markets.

# Possibilities of SiC power semiconductors

In addition, silicon carbide (SiC) semiconductors are attracting attention as next-generation power semiconductors. SiC semiconductors, which are made mainly from silicon carbide, are high-performance power semiconductors featuring smaller dimensions and lower power loss than conventional power semiconductors. We would like to expand these semiconductors strategically as one of our themes in the next ten years.

# A duty to create a corporate culture and climate

While I have a wide range of duties as the president, the one that I have been strongly aware of since I took office is the creation of our corporate culture and organizational climate. To date, we have refined our technologies through solving the challenges that customers present to us. In other words, our company has been developed by its customers.

This is by no means bad. However, I would like to make this company a team of people who think and run on their own, partly to achieve our vision of being a global power solution partner.

We hold the AC Cafe internal community event which is aimed at enabling participants to talk with me. It was named AC, alternating current, because the Japanese word for AC is koryu, which also means interaction. The AC Cafe is a place for seven to eight people including myself to have a real, face-to-face discussion. The duration of each session is about one hour. While the time spent talking is short, this event allows me to identify on-site problems that I had not been aware of. I also receive e-mails directly from participants after each session. Therefore, I feel the AC Cafe has begun to produce results. Through this project, I am planning to talk with all employees, including the members working overseas.

# Formulating our purpose toward the next step

One of the major topics in 2023 is the formulation of our purpose. We already have our corporate philosophy. I think that the corporate philosophy is the idea positioned at the top, and this position will not change. However, the corporate philosophy states our frame of mind for operating our businesses. We had yet to define in which domains we will contribute to society in what ways. Therefore, we decided to determine a purpose at this time to move to the next stage. The process of formulation was as follows. Members that were mainly young employees who are future

leaders prepared a draft, and project members who play leading roles in the management of our brand considered the draft. The Board of Directors further refined the purpose through discussions.

As a result, we were able to create our purpose, "Contributing to society in the domain of power electronics." Hereafter, we will continue working to create a new future with this purpose.

# Improving management efficiency and striving to create corporate value

Thanks to all of you, Sansha Electric Manufacturing celebrated our 90th anniversary in April 2023.

I would like to express my gratitude to all of our stakeholders, including our customers, business partners,

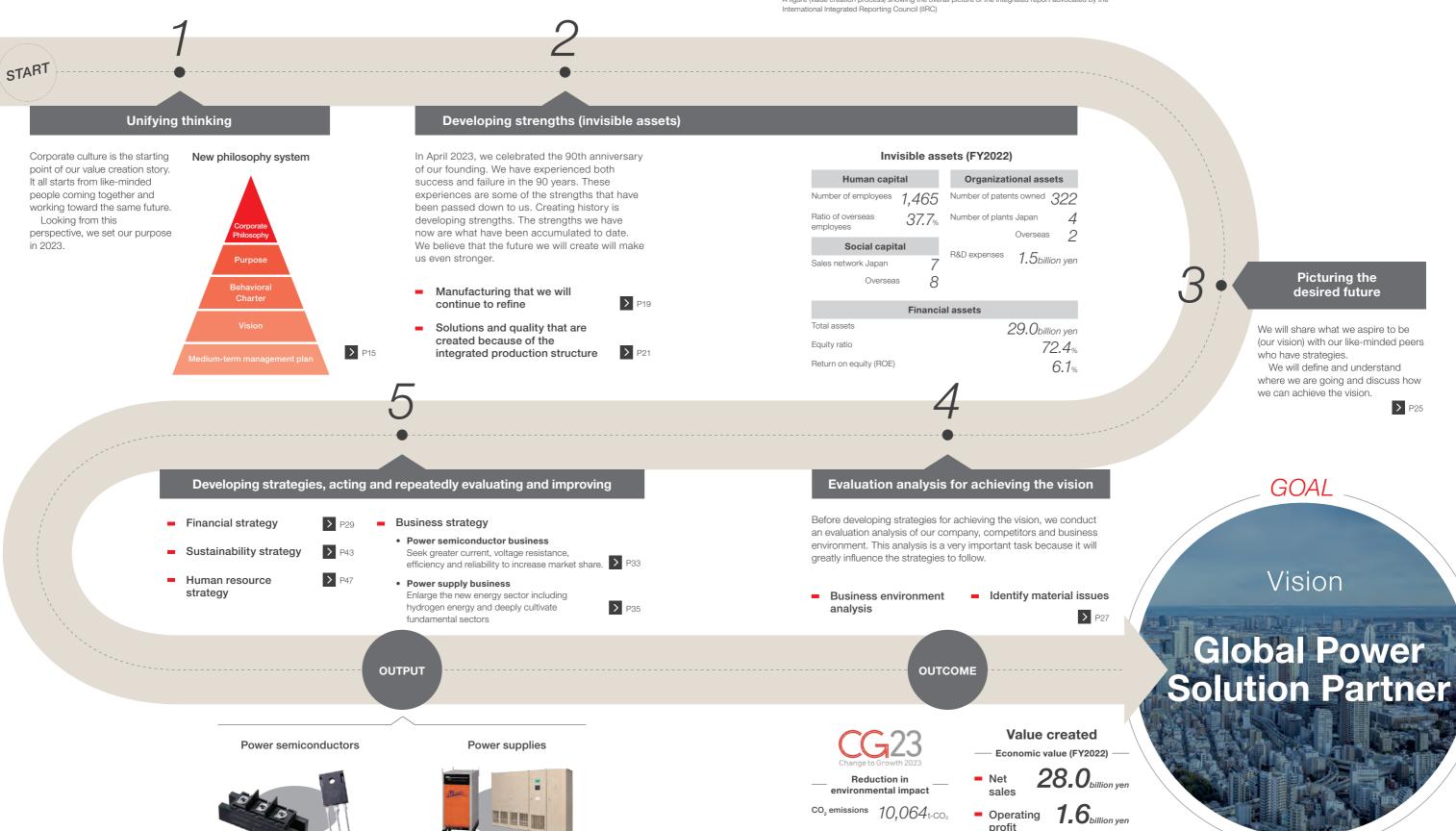
employees and their families. Please let me reiterate that in the past year, we have become confident in the direction that we should move in. As a listed company, we will continue to improve our management efficiency in our efforts to be a company that is deemed to be promising. I appreciate your continued support. Please have high hopes for the Sansha Electric Manufacturing Group which will continue to evolve over the next ten years toward the 100th anniversary.



# **Value creation story**

Until last year, we took the perspective of what processes we should follow to create value, based on the IIRC's Octopus Model.\* This year, we tried to organize the elements into a story from a longer-term perspective. Although it will involve trial and error, we will work to enable people to connect with the value (of the Sansha Electric Manufacturing Group.

\* A figure (value creation process) showing the overall picture of the integrated report advocated by the



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**>** P07

Ratio of

reduction from FY2013 level

Earnings per share 95.

# Formulation of the purpose

# The foundation that enhances our corporate value is culture.

When telling our corporate value creation story, we place the greatest emphasis on our strong corporate culture. Peers who share the same values come together and devise creative measures and make efforts toward the desired future, aiming to create a more prosperous future. This is a future in which the people who join our organization lead fulfilling lives and are happy.

# Relationship between our philosophy system and strategies

The higher an element is positioned in our philosophy system, the more unchangeable it is. The lower the element is, the more likely it is to change with the times.

# Why did we need a purpose?

than before and overseas Group companies, we decided that we set our new purpose.

Further, the higher it is, the more committed management should be to it, while employees should be more committed to the lower items on a daily basis.

Since our founding, we have been operating business based on our corporate philosophy and mission, attaching importance to the development of our corporate culture. With more employees redefining the meaning of our existence and setting it as a goal was essential for our achieving growth in the future. This is why

Unchangeable meaning of our existence and our goal

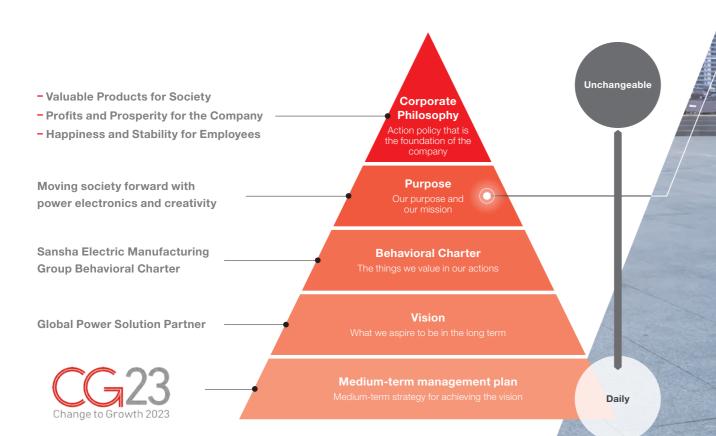
Our purpose

# **Moving society forward** with power electronics and creativity

Since our founding, we have been engaged in transforming and controlling electricity. This will remain unchanged.

Continuing to be an entity with one-of-a-kind technologies and services that moves society forward to a bright future -

this is our purpose and our mission.



Our thoughts reflected in words

Power electronics

This is our role in society and our business domain, which will remain unchanged. We are always engaged in power electronics

Creativity

technologies and services.

**Moving society** forward

we will be a driving force moving society in a better direction. This is our purpose and our mission.

Process of formulating the purpose and

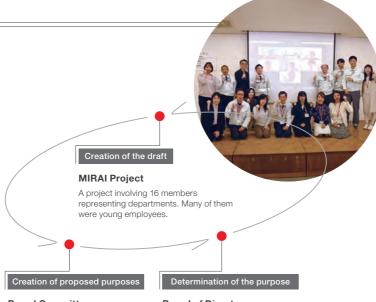
the roles of the Board of Directors

Developing strengths (invisible assets)

Picturing the desired future

We formulated our purpose over the approx. four months from December 2022 to March 2023. The members of the MIRAI Project, 16 selected young and mid-career employees from the bases, departments and subsidiaries, interviewed the Honorary Chairman and the President. Later, they created a draft following discussions about the past and the future of our company. The Brand Committee consisting of the President and the Operating Officers who are the Executive General Managers of divisions

The Brand Committee narrowed down the list of proposed purposes, selected the final proposal, and determined the purpose following deliberation by the Board of Directors. Because all of the internal Directors are members of the Brand Committee, the final deliberation by the Board of Directors were mainly dialogue with the Outside Directors.



## **Brand Committee**

Consists of the President and the Operating Officers who are Executive General Managers of

## **Board of Directors**

# **Future tasks and measures** to instill the purpose

deliberated and refined the draft.

Moving forward, we will promote many initiatives so that every employee will understand and accept the purpose and voluntarily think and act with an awareness of the purpose in the future.



Recognition

Recognizing the purpose

# · Provision of information by the President

Main initiatives

- · Provision of information on the website
- Putting up posters
- Provision of information via internal newsletter



2



Understanding its meaning for the company

- Explaining using e-learning programs
- · Holding sessions to exchange opinions with the President



**Empathy** 

Creating empathy

· Using media



PROCESIS

Commitments

Taking a positive stance, regarding the purpose as something that one implements voluntarily

- · Taking workplace social gatherings as an opportunity to consider one's own
- Using the Career Plan Sheet

PROCESS

5

Actions taken voluntarily with an awareness of the purpose

Every employee voluntarily thinks and acts with an awareness of the purpose.

# Evaluation analysis for achieving the vision

# **MIRAI Project** Member's Voices

Members of the MIRAL Project created a draft of the purpose. We requested that the project members tell us what they felt during the project, aspirations on what they want to be aware of hereafter, and others.



Coordinator of Corporate Planning Department Yuriko Karitani

I will work to proactively act and engage in dialogue as a member of the indirect department. thus providing support to move society toward a

Deputy General Manager of Eastern Japan Sales Department-1ST Section Takuya Hagita

I will contribute to creating one-of-a-kind services through marketing thinking.



# Coordinator of Information Systems Department Yuki Hashino

I will be conscious of not only economic efficiency

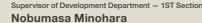
## Senior Coordinator of Human Resources Department **Goro Ihara**

To move society toward a bright future, I will try to create a bright workplace environment within the



# Senior Coordinator of Product Planning Department Nobuo Yoshimoto

I will think about the roles of our products based on how they can contribute to society.



I will work on the development of products which will move society forward.



## Senior Coordinator of Manufacturing **Engineering Department** Yusuke Nakai

I will value my intention to take on challenges and careful work, believing that my work will move society and the company forward.

# Supervisor of International Sales Department Yuna Sekine

I will provide better services in an effort to increase our visibility not only in Japan but also overseas



# Developing strategies, acting and repeatedly evaluating and improving

# Production of a purpose movie https://www.youtube.co

The members of the MIRAI Project, which played the leading role in the project to determine the purpose, produced the purpose movie as a measure for instilling the purpose. In the production of the video they exchanged ideas about the scenes to be shot, composition, interview content and other matters. Please take this opportunity to view the video.



Power Device Development Department Yu Nishio

I will contribute to creating one-of-a-kind technologies by acquiring many patents and

## Deputy Manager of stern Japan Sales Department-1ST Section Masatsugu Yamashita

I will focus on how to leverage our creativity to move forward.





# Semiconductor Applied Technology Center Ryota Takahara

I will work on all tasks with sincerity and an awareness that I am a member of a company which helps society move forward.

Supervisor of Sales Department, Sansha Solution Service Co., Ltd.

Tatsuya Nishii

All of us will move in the same direction and support the company with the same will.



Deputy Manager of General Department, Suwa Sansha Electric Co., Ltd. Hiromu Nishizawa

I will help the company move society forward.

# Coordinator of Engineering Department Tsubasa Kozako

I will work on each immediate task and surely and steadily lead it to better manufacturing.





Vice President, SANSHA ELECTRIC MFG. (GUANGDONG) CO., LTD. Kiyohito Hayashi

I will explain these thoughts to our staff in China in my efforts to instill the purpose.

# Design Department Minako Yamamura

I will strengthen people's relationships and join forces with them to take on new challeng



Developing strengths (invisible assets)

Picturing the desired future

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

# Manufacturing that we will continue to refine

We were the first to use semiconductors in power supplies for movie projectors. This was the first product we manufactured after our founding. We have been contributing to the movie industry by using electronic control to provide stable light sources. Further, we succeeded in the in-house production of a semiconductor with applications in plating rectifiers and welding machines, thus contributing to the development of industry in Japan as well as Osaka. Currently, we continue to hone the technologies developed in those days and we are a leader in

environmentally friendly power supply technologies.

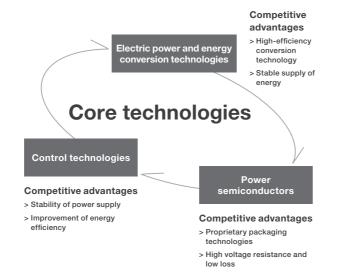
The range of applications has expanded. We provide power supplies for surface treatment, arc generators for welding machines, power supplies for lighting equipment and other equipment, various power conditioners and power supplies for the evaluation of environmentally friendly equipment and equipment applying new energy and highly reliable and customized power supplies which continue to stably support electronic equipment.

# Core technologies =====

# Core technologies and advantages

We have been engaged in the manufacturing of power semiconductors for 60 years. We are able to boast to the world about the high reliability of our packaging technologies that are used for the servo drivers of machine tools, which must have high capacity to endure repeated charging, as well as welding machines and PV junction boxes.

What constitute the design and manufacturing of power supplies, which consist of devices and control technologies, are exactly the power electronics technologies that have been attracting attention in recent years as part of national strategies. The power supplies manufactured by the Sansha Electric Manufacturing Group incorporate high-speed digital control technologies. Highly responsive and precise, they are praised by the industry. In addition, their environmental durability, which was fully developed on plating and welding work sites, enables them to be utilized in many settings.



# Research and development =

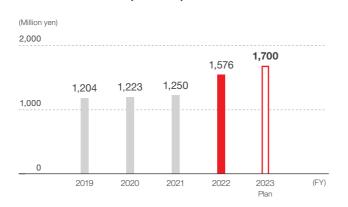
# Development themes and investment policy

At the Sansha Electric Manufacturing Group, we pursue research into technologies to further improve the reliability and heat resistance of power modules in high voltage and capacity ranges, new bonding technologies, the expansion of applications for SiC devices and next-generation semiconductors, to support social infrastructure.

Further, we will realize electric power conversion technologies that will enable high-speed, high-precision control in addition to compact dimensions and high efficiency. By applying communication and system technologies, we will enable electric power converters to evolve so that they can connect to peripheral equipment.

As an initiative to remain our customers' solution partner, we will use Al in our R&D processes and work on DX and automation in our efforts to reduce development lead time.

# Research and development expense



# Intellectual property =

## Concept behind the intellectual property strategy

We believe that the unique qualities of the Sansha Electric Manufacturing Group lie in the support for the natural environment and social environment that we provided leveraging our technological strengths, with our intellectual property strategy built on our sales strategies reflecting our understanding of "technology strategy, management strategy and partners' strategies," based on the Global Power Solution Partner concept. Therefore, in our intellectual property strategy, we position intellectual property as management resources for protecting customers' markets and achieving goals together with them, and our activities are focused mainly on creating and maintaining competitiveness. In addition, we will strive to maintain and improve our corporate value and brand through these high-quality initiatives.

## Intellectual property activities

The Group implements initiatives to increase its competitiveness, starting from increasing intellectual property awareness and proactively obtaining intellectual property rights to achievements made through various R&D efforts and analyses and protecting and controlling intellectual property rights.

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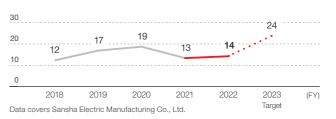
- Actively obtain intellectual property rights for inventions such as innovative new technologies and original designs.
- File applications to secure international intellectual property rights and maintain, manage and control them in accordance with the global strategy.
- To expand business in emerging countries, continuously collect information on counterfeit products to take appropriate measures to address them

## **Employee invention incentive program**

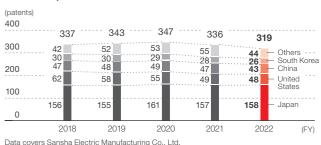
We have an employee invention incentive program aimed at encouraging engineers to develop inventions and at supporting corporate development and the improvement of individuals' skills by protecting and utilizing their inventions.

# Applications for and ownership of intellectual property rights

# Number of applications



## Number of patents owned



# Supply chain management =

The Group carries out sustainable procurement activities throughout its supply chain to operate its business, which encompasses an extensive lineup of products all over the world. For this purpose, we ask suppliers to understand and comply with our Procurement Policy, which stipulates the observance of laws, ordinances and social norms, consideration of human rights and industrial safety, use of conflict-free minerals, consideration of the environment and the upholding of other social responsibilities.

In addition, we impartially evaluate and choose suppliers in accordance with the criteria below.

- Our suppliers must observe laws, ordinances, social norms and equivalence and place importance on human rights and the environment.
- Our suppliers must have a sound financial position and information management systems.
- 3 Our suppliers must supply materials and services with an appropriate quality, price and delivery lead time.
- Our suppliers must have the ability to ensure stable supply and flexibly respond to changes in supply and demand.

  Our suppliers must conduct value analysis (VA) and value engineering (VE)
- Our suppliers must conduct value analysis (VA) and value engineering (VE) activities\* to achieve mutual prosperity.

  Our suppliers must carry out risk management activities, such as business.
- supplying even in unexpected disaster or other extreme situations.

  \* Value analysis (VA): Activities reducing the cost of mass-produced products throughout

continuity planning, under normal circumstances to hold a capacity to continue

We will observe laws, ordinances, social norms and equivalence and place importance on human rights and the environment

# Procurement Policy

2 We will offer fair transaction opportunities to suppliers.



# Use of conflict-free minerals

The Group has drawn up the Sansha Electric Manufacturing Group Conflict Minerals Response Policy. From a humanitarian point of view, we will not use any conflict minerals, such as tin, tantalum, tungsten or gold, that are produced using inhumane practices in the Democratic Republic of the Congo and the surrounding region.

Sansha Electric Manufacturing
Group Conflict
https://www.sansha.co.ip/csr/purchase.htm



Value engineering (VE): Activities thinking about the maximization of value from the process of product development (consideration of design)

Picturing the desired future

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

# Solutions and quality that are created because of the integrated production structure

# Integrated production system

Our power semiconductors supporting high voltage and current are manufactured in an integrated production system including wafer processing and package assembly. Power supply devices, circuit boards and other components are manufactured in an integrated production system that includes development, design and manufacturing. This enables us not only to provide standard products but also to quickly deliver products which are specially customized to cater to customer needs.

The Sansha Electric Manufacturing Group develops, designs and manufactures both power semiconductors and power supplies. This has made us very familiar with how power semiconductors are used in power supplies. That allows us to create proposals that are highly efficient, safe, and best suited to the specific environment the customer will use them in, including peripheral circuits.

We believe that maintenance is a vital part of ensuring the safety of power supplies. We are ready to provide one-stop support including efficient installation, operation, maintenance and replacement. Please watch the video, which mainly introduces the manufacturing processes at the Okayama Plant (semiconductors) and the Shiga Plant (power supplies).

Our plants



characteristic tests and

other tests

## Strengths of the integrated production system

# Stable quality

Quality checks are conducted in all processes to maintain stable quality.

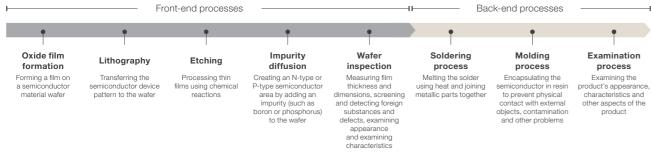
# Customization

To respond to diverse needs, we propose solutions to customers from the perspectives of high efficiency. safety and other perspectives.

# **Quick delivery**

The time from production to delivery is shortened by streamlining the production process.

# Power semiconductor manufacturing processes

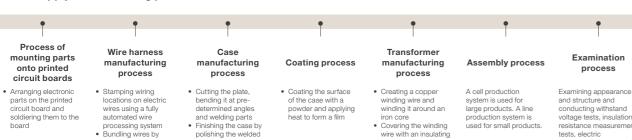


# Power supply manufacturing processes

Bundling wires by

converting a three

parts to prevent



material after the

wire has been wound

# Quality management =======

The Group implements quality management attaching importance to increasing customer satisfaction and social value. We strive to create more value by appropriately managing products' safety, environmental performance, service life, maintainability and other elements, in addition to achieving product specifications, such as specifications for functionality and operability. Quality management is implemented by all organizations of the company and quality improvement activities are carried out continuously via management circles.

An important feature is that information can be shared seamlessly between the power semiconductor business and power supply business that uses power semiconductors. This has resulted in our skills for appropriately assuring quality and our after-sales services, in addition to sales activities and development and design in both businesses.

In addition, we focus on quality in all phases, from product planning to development, design, manufacturing and after-sales services and we provide feedback using the quality information collected by each section to the departments that need such information. This is how we improve product quality, with the goal of achieving sustainable growth.

Further, we have internal plants making plates, transformers, harnesses, printed circuit boards and other parts. This enables us to demonstrate our comprehensive ability to ensure high quality, which is our strength. We internally manage the quality of parts in our efforts to improve the quality of products as a whole.

# Quality assurance system diagram



# Sansha Electric Manufacturing Group Quality Policy

satisfaction



Comply with related laws. regulations and social norms.

Make customer satisfaction the top priority and respond to the demand generated by society leveraging the highlevel technological capabilities we have accumulated and strive to improve customer

Refine quality with an integrated system

including product planning, development order acceptance, design manufacturing and after sales services to deliver reliability to customers.

Company-wide activities for quality improvement

Work together company-wide to improve quality through business improvement activities, the development of human resources and S-PS activities.\* which are smallgroup activities unique to our

\*SanRex Producer System activities

of the quality management system Establish a quality management system adapted to social

environment and management

# Proposing solutions to customer issues

The Group conducts the integrated production of highvoltage and large-current power semiconductors and power supplies. This means that we internally conduct all processes ranging from wafer processing to package assembly for power semiconductors and every process from the development and design of circuit boards to their assembly for power supplies. This allows us to provide customers with the proposals that are best suited to their needs from the perspective of high efficiency, safety and other features.

The medium-term management plan states that one of the priority measures for the power supply business is to accelerate the proposal of systems that combine power conditioners with storage batteries and network functions, rather than proposals related to power conditioners alone. A strength of the Group is the flexibility of its development and manufacturing. We will help customers solve their problems by proposing systems based on this strenath.

# Test equipment that contributes to product quality =====

To deliver reliable, satisfactory products to customers, we have installed and use a variety of test equipment to maintain the safety of our products and improve their quality.

# **Example test equipment**





# Electromagnetic anechoic chamber and sealed room

In accordance with IEC standards (international standards for all electrical, electronic and related technologies) and other standards, we measure electromagnetic waves to see if our products affect other electric equipment and for other purposes.



## Software testing system

Previously, it was necessary to assemble hardware when verifying software. The introduction of this system enables us to test software without assembling hardware. We use this system to improve the efficiency of software development and improve quality.





# **Environmental test room**

We conduct environmental performance tests to check our products' tolerance to low temperatures, high temperatures and high humidity.

# S-PS activities =

Since 1970, we have been engaged in QC circle activities called the SanRex Producer System (S-PS) activities. S-PS activities are based on QC circle activities and incorporate the policies of the company's organizations. Through these activities, we encourage employees to identify and solve problems and practice and learn methods for improving, in our efforts to improve their ability to execute business and further, to develop next-generation leaders. Another goal of these activities is to contribute to the establishment of rewarding workplaces with positive atmospheres.

We hold a conference for presenting achievements twice a year. During the conference, awards are granted for excellent activities selected based on the recommendations of the chairperson of the S-PS Activity Promotion Committee.



S-PS activities presentation conference

# Total solution services deliver safe and secure power supplies

Sansha Solution Service Co., Ltd., a maintenance service company of the Sansha Electric Manufacturing Group, caters to customer needs with one-stop services including the installation of power supply equipment as well as the operation, maintenance and replacement of equipment under its policy of providing services which support the stable operation of power supply equipment.

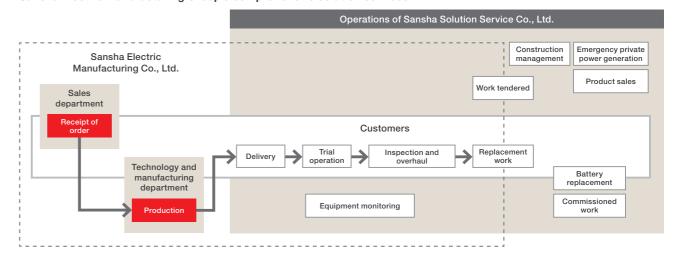
Sansha Solution Service is implementing four priority measures in the medium-term management plan to enhance the total solution services of the Sansha Electric Manufacturing Group.



Power supply maintenance and inspection services

Four priority measures under the medium-term management plan	FY2022 Initiatives	Achievements	Issues	
	Increase service staff and sign contracts with new service partners to improve the service structure	Signed consignment contract with a new partner company	Develop service staff at the new partner company	
1 Improve quality of services	Train service staff to develop their skills	In FY2022, group training for service staff was provided three times	Provide training continuously to enable the establishment of the content of the training program	
	Build a system for preventing mistakes in work	Released an electronic form system in September 2022, aiming to standardize inspection work	Enhance the electronic form system	
Accelerate construction of the maintenance structure	Carry out a demonstration trial of the remote maintenance system	Installed remote systems in already-delivered uninterruptible power supplies and confirmed that it is possible to check the condition of local areas and receive abnormality alerts	Maintenance proposals need to be submitted at the time of the installation and introduction.	
3 Enhance the construction work implementation structure	Increase staff qualified as construction management engineers for construction work	Increased the number of technical supervisors to 9 and the number of class-1 electrical supervising engineers to 12	Establish a structure for expanding construction work	
4 Propose long-term service plans	Propose long-term maintenance services for a recommended operation period from the start of operations	Long-term service plans were developed for inverters and other products delivered in the past ten years.	Propose long-term service plans     Improve services for large power supplies	

# Sansha Electric Manufacturing Group's comprehensive solution services



Unifying thinking

Developing strengths (invisible assets)

Picturing the desired future

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

# Our desired future

# Formulation of a long-term vision —

In 2018, we formulated our long-term vision — the desired future of the Group as a whole. Before that, the medium-term management plan had been our longest-term goal, which meant that our focus had been on achieving results that were better than before. Amid major changes in the business environment. we needed to transform and evolve from a longer-term perspective. How should we change and evolve? Our direction was defined in the long-term vision.

# Changes after the formulation of the long-term vision

The thing that changed most greatly following the formulation of the long-term vision is the awareness of employees involved in development and services. Regarding newly developed products and services, employees have started discussing issues and making decisions on site from the viewpoint of the future that lies ahead of the products and services and whether the products and services can contribute to the future we desire.

Of course, this does not apply to everything because we have a track record of successful experiences. However, we have steadily come to think from a long-term perspective.

# Evolving from a contractor to a partner with the world being our stage

We have identified four specific elements of this vision. They are solutions, globalization, technologies and trust. The first two elements, solutions and globalization, represent the desired direction of our business. This means that they are our ambitions and potential as of 2018. We have been growing gradually by taking on customers' problems, fulfilling their requests and exceeding their expectations. In a way, these are our strengths. However, if we do not change, we will reach our limits someday.

We would like to be more independently minded, build our own brand, and become a reliable partner for global customers. This is what we thought. To make this a reality, the remaining two elements, technologies and trust, are necessary. We will hone our proprietary technologies and compete on the world stage. We will earn trust using our sincerity and quality to ensure that customers continuously select us. These two elements are necessary for us to be a true partner.

# Continuing to be a partner that listens to customers and

# Our Vision

specific elements that we aim to obtain in the long term

# **Global Power**

# Technology

We will have world-leading technologies related to power electronics, which have been our strength since our founding.

We are a company that has technology at its core. We will continue to hone our unique technologies, aiming to be a corporate group with world-leading technologies in the field of power electronics.

# Solution

Capitalizing on power electronics technologies, we will thoroughly identify customers' problems and resolve them.

We have been developing by solving the challenges presented to us by customers using our technologies. Moving forward, we will not only address the challenges given to us by customers but also delve deeper into their problems to evolve into their partner.

# All of our strategies exist for achieving the vision

We established some strategies in our medium-term management plan, including business strategies, human resource strategies and sustainability strategies. The purposes of all of the strategies are to achieve the long-term vision. While the timelines of the strategies differ, all of them are aimed at achieving our vision, becoming a Global Power Solution Partner. Although we are only halfway there, we will make Group-wide efforts to achieve the long-term vision.

meets their expectations in the provision of solutions

# **Solution Partner**

# Global

# Taking a global perspective, we will operate our business on a wholly global scale.

To date, we have operated businesses mainly in Japan. Moving forward, we will turn our attention to the world and aim to be a corporate group that solves social issues by providing technologies and services from a global perspective on a global scale.

# Trust

# We will earn the unrivaled trust of society for our quality and sincerity.

We attach importance to sincerity and quality. Based on these two elements, we aim to be a corporate group that is trusted by society as a whole, including our customers.

# Management material issues

# **Material issues**

At the Sansha Electric Manufacturing Group, we have been proactively contributing to building a sustainable society through business under one of the components of our corporate philosophy: Valuable Products for Society. Since before the Sustainable Development Goals (SDGs) were adopted, the Sansha Electric Manufacturing Group has been addressing social issues, attaching importance to environmental consideration and responsibility for social impact.

Jnifying thinking

In formulating the CG23 medium-term management plan, we paid close attention to social issues and evaluated important factors that are directly related to the Group's business, as well as the interests of our stakeholders and the impact on them. Through this evaluation process, we identified six material issues that we should tackle on a priority basis at the Sansha Electric Manufacturing Group.

These material issues have been integrated into our business strategies in the medium-term management plan, and we will address the issues by formulating and implementing specific measures. In addition, these measures will be taken not only to pursue the Group's growth and profits but also to contribute actively to achieving the SDGs. At the Sansha Electric Manufacturing Group, we will address social issues leveraging our technologies and innovations, thus contributing to the establishment of a sustainable society.

# Process of identifying material issues

Identify social issues

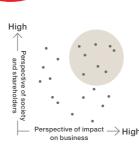
Analyze the selected issues

Identify and review material issues

We selected the social issues that the Sansha Electric Manufacturing Group will focus on by referencing the Sustainable Development Goals (SDGs) and other international initiatives, the code of conduct in the industry the Group is a part of (the Responsible Business Alliance (RBA) Code of Conduct\*), major guidelines (the Global Reporting Initiative (GRI) and ISO 26000) and megatrends.

\* The RBA Code of Conduct is guidance formulated for electronics industry and electric equipment-related industry supply chains.

We analyzed and assessed how significantly the selected social issues interested stakeholders, the size of their impact and how significant they are to the Group to create a draft set of material issues.



We determined the priority material issues to be addressed after the management team assessed the appropriateness of the draft. The Board of Directors adopted a resolution regarding them concurrently with the mediumterm management plan.

Going forward, each time a new medium-term management plan is formulated, we will revise them in consideration of changes in business circumstances and society.

# Identify social issues

27

# Analyze risks and opportunities

Social issues to which we pay close attention	Risks	Responses and opportunities				
Climate change	Suspension of business activities due to natural disaster     Tight electricity supply-demand balance	Development of technologies and products for stable power supply     Development of environmentally friendly products     Investment to replace aging equipment				
Rise of renewable energy and new energy	<ul><li>Instability of electricity supply</li><li>High cost of power generation</li></ul>	Increase in business opportunities     Development of technologies and products compatible with new and renewable energy				
Shift of global economic power from developed countries to emerging countries	Fierce competition due to market expansion     Impact on global environmental problems	Expansion of the areas in which we operate     Response to infrastructure development associated with urbanization				
Progress of technologies/innovation	Delay in the utilization of digital technologies     Emergence of new competitors following technological innovation	Development of technologies and expansion of services using IoT				
Decline in the domestic population      Decline in the domestic population      Decline in the domestic population      Decline in technological strengths caused by difficulties in acquiring human resources		Innovation utilizing diverse human resources Improvement of productivity by improving business efficiency  Development of human resources that are experts in technology				

# Material issues that were identified and main initiatives

Material issues	Main initiatives	Related SDGs
Contribution to a carbon-free society and environmental conservation	<ul> <li>Development of high-efficiency products</li> <li>Development of products related to new energy and renewable energy</li> </ul>	7 difference and control of the cont
Constructing a robust infrastructure and contributing to industrial development	<ul> <li>Development of uninterruptible power supplies (UPS)</li> <li>Stable supply of power supplies for surface treatment</li> </ul>	9 MINISTRANCIONE 11 MINISTRANCIONE 13 ACRANI AMERICANA 13 ACRANI AMERICANA A
Providing safety, security and new value to improve services	Creation of proposals for systems rather than selling standalone products     Reinforcement of the remote maintenance system	12 REPORTED AND PART OF PRINCIPAL AND PRINCIPAL AND PRINCIPAL AND PRINCIPAL AND PART OF PRINCIPAL AND PART OF
4 Strengthening of manufacturing	Implementation of IP strategy     Investment in streamlining and automation     Design standardization	12 ESPIRABLE CONCRETED AND PRODUCTS
Reduction of the environmental impact of production activities	<ul> <li>Setting up projects to reduce CO<sub>2</sub> emissions</li> <li>Considering the replacement of aging equipment</li> <li>Procurement of power from renewable energy sources</li> </ul>	7 AFFERDALE AND 12 EXPONENTE TO COCCUPITATE AND PRODUCTION AND PRO
6 Promotion of diversity and personnel in action	Reviewing human resource development systems and increasing education and training programs Promoting diversity Improving work environments	5 GENNIC: SCHOOL AND SCHOOL CONTIN

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

Message from the Director in charge of financial affairs

# Improving capital efficiency to enhance our corporate value



We celebrated the 90th anniversary of our founding in April 2023. However, we must improve our growth potential and profitability by more efficiently using the invested capital as we look toward our 100th anniversary. Further, we must be a company which fulfills its social responsibilities. While it is necessary for the Sansha Electric Manufacturing Group to expand its business with the goal of contributing in growth areas such as the new energy sector to continue its growth, we need to improve profitability at the same time. Unfortunately, our operating profit ratio has been sluggish,

having remained below 10% for eight consecutive years. To improve this, we must take company-wide measures. Against this background, we use return on assets (ROA) based on consolidated operating profit as a management indicator and we are working to improve the ratio of operating profit to net sales and total asset turnover.

The improvement of the ratio of operating profit to net sales is dependent on our ability as a manufacturer to propose solutions that enable customers to achieve value. While we have been operating business leveraging

our readiness to fulfill the needs of customers, which is a strength of ours, we will build relationships which enable us to appropriately profit by exploring the true needs of customers to offer benefits, and at the same time, standardizing and providing products. These activities need to be carried out by not just the sales, product planning, and development departments but by the entire company, including the manufacturing and supporting departments. We will enhance our initiatives focused on the improvement of added value.

We would like to improve total asset turnover by increasing the efficiency of investments, including capital and R&D investments, and at the same time, controlling inventories and other current assets to keep them at appropriate levels.

The Tokyo Stock Exchange has requested the "action to implement management that is conscious of cost of capital and stock price." While our cost of capital is approx. 8% at present, ROE is currently a low 6.1%. We are promoting initiatives to achieve an ROE that exceeds the cost of capital. The first step will be increasing ROA based on operating profit to 8% in the operational departments within three years, and we will strive to continue to improve profitability, with the goal of increasing it to 10%. For this purpose, we will work to fully understand the current situation to see if our existing activities are sufficient, and we will

promptly take measures for the points that need to be changed.

It must also be noted that sustainability management is an essential constituent of corporate value. We will give our full attention to the environmental sector and make the necessary investments. At the same time, investment in intangible assets such as human capital and intellectual capital is also an essential factor for sustainable growth.

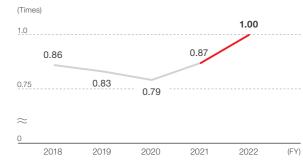
We will appropriate retained earnings from profit-oriented initiatives in operating activities to invest for future growth (capital and human resource investments) in a well-planned manner, and at the same time, we will continue to deliver returns to shareholders in a well-balanced manner.

We have a basic policy of continuing to pay dividends stably with a target dividend payout ratio of around 30% of consolidated net profit. The forecast annual dividend for FY2023 (fiscal year ending March 31, 2024) is 40 yen including 5 yen as a commemorative dividend for the 90th anniversary. We intend to use the rest as a strategic fund for capital investment to accomplish the CG23 medium-term management plan, the research and development of next-generation products and other purposes.

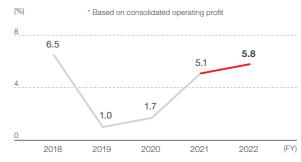
# Ratio of operating profit to net sales



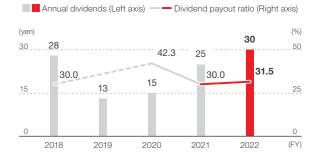
# Total asset turnover



# Return on assets (ROA)



# Annual dividends and dividend payout ratio



Picturing the desired future

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

# Overview of the medium-term management plan

# Basic policy

- · Innovation for continuous growth
- Contribution to the resolution of social issues

# **Change to Growth**

# Numerical targets \_\_\_\_\_

		FY20	21	FY20	22	FY2023			
		Medium-term management plan	Results	Medium-term management plan	Results	Medium-term management plan	Results forecast*		
		21.8 billion yen	22.6 billion yen	24.0 billion yen	28.0 billion yen	26.0 billion yen	30.5 billion yen		
Net sales	Semiconductor business	6.3 billion yen	7.7 billion yen	6.9 billion yen	8.1 billion yen	7.4 billion yen	8.5 billion yen		
	Power supply business	15.5 billion yen	14.8 billion yen	17.1 billion yen	19.9 billion yen	18.6 billion yen	22.0 billion yen		
		800 million yen	1.3 billion yen	1.3 billion yen	1.6 billion yen	1.9 billion yen	2.0 billion yen		
Operating profit	Semiconductor business	200 million yen	700 million yen	300 million yen	500 million yen	400 million yen	300 million yen		
	Power supply business	600 million yen	500 million yen	1.0 billion yen	1.1 billion yen	1.5 billion yen	1.7 billion yen		
Ordinary profit		800 million yen	1.3 billion yen	1.3 billion yen	1.6 billion yen	1.9 billion yen	2.0 billion yen		
Profit attributable of parent	to owners	500 million yen	1.1 billion yen	900 million yen	1.2 billion yen	1.3 billion yen	1.4 billion yen		
Earnings per shar	е	39.15 yen	83.30 yen	64.07 yen	95.33 yen	92.54 yen	105.26 yen		
Return on equity	(ROE)	2.8%	5.9%	4.4%	6.1%	6.1%	6.5%		

\*Announced on May 10, 2023

## Overview Related SDGs 13 #F 14 #F Developing diverse products with high environmental issues energy and new energy sectors Expectations for O Tighter environmental regulations hydrogen and new energy Reduction of Economic growth in developing and emerging countrie Developing uninterruptible power Necessity to construct robust infrastructure O Loss of capital investment opportunities due to large supplies for surface treatmer Response to digital shift • Use of Al and loT Progress in IoT technologies Progress in cominifrastructure O Product incidents and failures Rapid urbanization • Use of our accumulated intellectual properties Promoting the standardization and Decrease of skilled engineers O Difficulty in procuring raw materials emerging countries Constructing robust infrastructure Reducing the Competitiveness gained by reducing environmenta Pursuing CO<sub>2</sub> reduction and impact of product Changes in population O Tighter environmental regulations structure • Decrease in the working population in Japan Promoting diversity and the active Innovation rooted in diversity Shift to new workstyles Aging society promoting diversity attributed to Japan's shrinking working population

We understand that social issues related to the businesses of the Sansha Electric Manufacturing Group have remained unchanged since May 2021 when we announced the medium-term management plan.

We will implement initiatives to address material issues fully leveraging the Group's technologies to solve social issues, such

as the improvement of energy efficiency, renewable energy, climate change, marine pollution and disaster response, thereby contributing to the achievement of the SDGs. We aim to establish a sustainable society and achieve the sustainable growth of the Group.

# Overview of FY2022

In FY2022, COVID-19 restrictions were gradually eased. This has led to moves to normalize economic activity. On the other hand, the Russia-Ukraine situation caused the prices of crude oil and energy to soar and the significant depreciation of the yen in the foreign exchange market. Due to these and other background factors, prices increased and there were concerns regarding the future of the economy.

In the environment surrounding the businesses of the

Sansha Electric Manufacturing Group, capital investment remained strong overall, but the rise of the purchase prices of raw materials, energy and transportation and other factors put pressure on profit.

In these circumstances, orders received remained at a high level in both the semiconductor business and power supply business, but they continued to be affected by the prolonged lead time in the procurement of raw materials.

# **Future initiatives**

FY2023 (fiscal year ending March 31, 2024) is the final year of the CG23 medium-term management plan. As of the beginning of the fiscal year, orders received were strong in both businesses. In the power supply business in particular, sales are planned to take place in major projects, including power supplies for the evaluation of power conditioners and power supplies for fine surface treatment. While we will continue to be impacted mainly by rising costs, including the cost of electricity, materials and logistics, investments for replacing and building production

systems and other systems and an increase in development expenses, profits are expected to be improved due to an increase in sales. We will make company-wide efforts to achieve the target profits for the final fiscal year of the medium-term management plan.

In the medium to long term, we plan to improve profitability and invested capital turnover, targeting a return on assets (ROA) of 10% or higher.

# Profitability improvement

To enable our engineering, production and sales teams to work as one in the aspects of both offense and defense to make our company highly profitable, we have set ROA (based on consolidated operating profit) as a KPI, targeting an ROA of 10% or higher.

It is anticipated that attaining the ROA target will result in

a higher level of return on equity (ratio of profit to equity) and achievement of ROE exceeding the capital cost.

We will reinvest the acquired profit to achieve the growth of the Group and improve its competitiveness, and as a result, enhance its corporate value.

## Priority measures Becoming a highly profitable company Value creation - Offense -Our KPIs FY2022 Target level in humar Development of high value-added capital ROA Cultivating new markets sed on consolidat operating profit) 5.8% 10% or higher Expansion of production capacity investment Operating profit/ 5.8% 10% - Defense net sales investment Design standardization Shortening lead time Production process impr Total asset Shareholder Optimum inventory 1 time

Achieving ROE that exceeds the cost of capital

The Sansha Electric Manufacturing Group does not develop or manufacture integrated

circuit semiconductors such as memory or microcomputers. Instead, it develops power semiconductors. These are used in diverse power supplies for the conversion of high voltages or currents between direct current and alternating current, for controlling

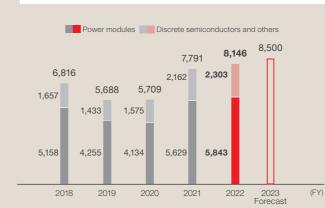
the current and voltage levels and for other purposes. They are adopted to customers' different production systems and incorporated into a broad range of power supply

Picturing the desired future

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

Net sales (in million yen)





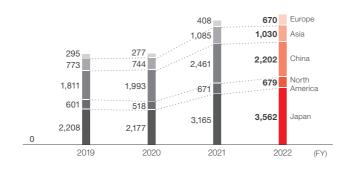
# Review of FY2022

In FY2022, sales of inverters for industrial use and power modules for welders and various power supplies increased steadily reflecting capital investment and infrastructure investment. In addition, sales of chips remained strong.

products to play significant roles in them.

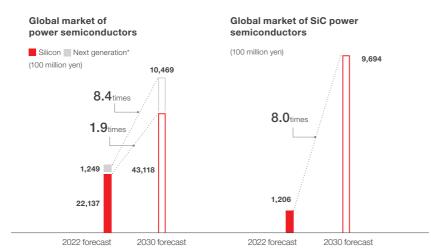
In China, the Group's mainstay market, sales of products for air conditioners, elevators, and electric bidet toilet seats decreased due to the lockdown and economic slowdown related to real estate, which was a result of the COVID-19 pandemic. However, sales in the business as a whole increased due to the steady performance of products for the Japanese market. In Europe and the United States, we will continue to ensure that our SiC semiconductors appeal to universities, research institutions and other entities and look for business opportunities in new industries

# Semiconductor sales by region (by location of sales destination)



# **Business environment analysis**

Some silicon carbide (SiC) power semiconductors are being used at present in industry for welders and induction heating, in addition to their use as inverters. It is expected, however, that SiC power semiconductors will see further growth in demand in fields such as automobiles and electrical components for improving power efficiency, reflecting the spread of electrified vehicles and charging infrastructure, in addition to an increase in demand in the field of information communication equipment, including server power supplies, and the energy field such as solar power generation.



\*SiC, GaN, gallium oxide, diamond

Source: Fuji Keizai Co., Ltd., 2023 Current State and Future Outlook of Next-Generation Power Devices & Power Electronics-Related Markets

# FY2023 forecast

While orders remain strong as of the beginning of the fiscal year, sales are expected to decline due to increases in capital investment, including automation equipment for streamlining and increasing production and the installation of solar power generation equipment at the Okayama Plant, and in R&D expenses, in addition to an increase in the costs of raw materials, electricity, logistics and other expenses.

Overview of capital investment	Objective	Estimated amount
Upsizing of wafers	Streamlining the wafer production process and increasing production	240 million yen
Lines for increasing production	Increasing and automating the production of redesigned products	530 million yen
Solar (PV) power generation	Streamlining and environmental measures	150 million yen
Total		1 billion yen

# **Priority measures**

In the semiconductor business, we plan to continue enhancing the lineup of SiC semiconductors and strive to find new customers. Further, with the goal of it becoming a 10 billion yen business through the development of new products under the concept of low leakage current, low loss and low environmental impact and the development and sale of thyristors, diodes and other highly reliable devices for use in infrastructure, which are areas that are expected to expand mainly in emerging countries, our production, sales and engineering teams will work as one to achieve high profitability.

In addition, we are striving to make semiconductor products completely lead-free as a part of initiatives to reduce environmental impact. We are studying manufacturing process not involving the use of high-temperature lead solder, which was excluded from the application of the RoHS2 Directive (directive on restrictions on use of hazardous substances). We have introduced equipment for testing lead-free solder that will enable the full demonstration of the reliability performance of various module products. We will continue to expand the lineup of products using lead-free solder.

In the aspect of production, we will enhance productivity by standardizing materials, increasing the operating rate of equipment, and further improving work efficiency, addressing the increase in the cost of materials, electricity, logistics and other expenses. Technology

- Enhancing the lineup of SiC semiconductors
- Enhancing the lineup of products under the concept of low leakage current, low loss and low environmental impact

Production

- Standardizing materials and improving design efficiency
- Introducing automated equipment

Sales

- Finding new SiC semiconductor customers
- Accelerating the market penetration of new products





**Developing strengths** (invisible assets)

Picturing the desired future

Evaluation analysis for achieving the vision

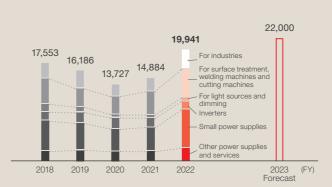
repeatedly evaluating and improving

**Growth strategy of power** supply business

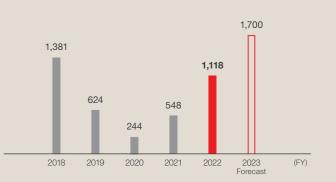
Since we developed a power supply for projectors ensuring the projection of stable images onto movie theater screens in 1933, we have been utilizing technologies that freely transform and efficiently convert electricity to develop and manufacture a wide variety of power supplies supporting the environmental and energy sectors, the infrastructure and facility equipment sectors and entertainment-related sectors.

As we engage in integrated production including development, design and manufacturing, we are able to provide standard products and also customized products tailored to customers' requests with short delivery lead times. After delivering products to customers, we consistently provide maintenance and other support services.





# Segment profit (in million yen)



# Review of FY2022

In FY2022, we achieved steady performance in the areas of power supplies for general industries, including those for processing materials used for lithium ion batteries, printed circuit boards and other products, seawater electrolytic processes, silicon pulling and other areas, as well as the high-precision power supplies for surface treatment, an area in which we excel, reflecting the growing demand for substrates that require high-precision surface treatments that are used in PCs, data centers and other places. Further, sales of small power supplies increased significantly and contributed to the growth of the

sales of the entire business, due to the remarkable recovery of the demand for small embedded power supplies for medical equipment and other products. By region, overall performance remained strong both in Japan and in other countries.

Meanwhile, on the production front, the procurement of raw materials (semiconductors, electronic components, resin molded products, etc.) has remained difficult. Further, soaring raw material prices and the weak yen put pressure on profit.

# FY2023 forecast

As of the beginning of the fiscal year, orders are strong and sales are expected to increase. In FY2023, sales are expected from major projects, including power supplies for the evaluation of power conditioners and power supplies for fine surface treatment. While we will continue to be impacted mainly by rising costs, including the costs of raw materials, electricity, and logistics, capital investment for replacing and building production systems and other systems, and an increase in development expenses, profits are expected to improve due to an increase in sales.

Overview of capital investment	Objective	Estimated amount
Equipment for streamlining processes	Process streamlining and increase of production	310 million yen
Equipment related to quality assurance and inspections	Quality improvement and legal compliance	160 million yen
Total		470 million yen

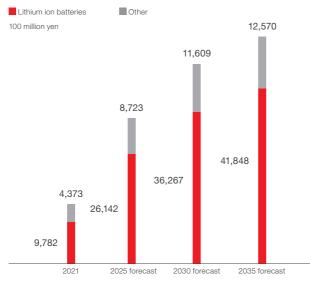
# **Business environment analysis**

In 2022, demand for power storage systems increased, mainly reflecting the expansion and ubiquitization of renewable energy, robust investments in data centers and 5G communications, and preparations for natural disasters. Demand for power storage systems is expected to grow in the future as countries set decarbonization and carbon neutrality targets and the introduction of renewable energy accelerates.



Inverter for storage battery

# The size of the power storage device market in the field of energy storage systems (ESS) and stationary storage batteries



Source: Fuji Keizai Co., Ltd.: Future Outlook of Energy, Large Secondary Batteries and Materials 2022 — ESS and Stationary Storage Batteries

# **Priority measures**

In the power supply business, we will work on the development of products related to new energy and renewable energy which are growth fields. We will also develop power conditioners for fuel cells, which use hydrogen, leveraging the technologies for solar inverters that we have cultivated. In the fundamental business, we will develop new products with higher power conversion efficiency. Further, we plan to propose not only standalone inverters but also systems that also include storage hatteries network functions and other features. In addition we will enhance the maintenance services of Sansha Solution Service Co., Ltd., our subsidiary, aiming to increase our market share for uninterruptible power supplies and other products.

On the manufacturing front, we will introduce automated equipment, increase the use of outsourced services, increase efficiency through the improvement of business and implement other initiatives to be ready to increase production.

- Enlarging the hydrogen and new energy and environmental sectors
- · Collaborative projects with business alliance partners · Strengthening the fundamental business (new products,
- Design standardization
  - Introducing automated equipment

improvement of existing products)

- Expansion from sales of standalone inverters to sales
- Proposing high value-added products • Accelerating price pass-through



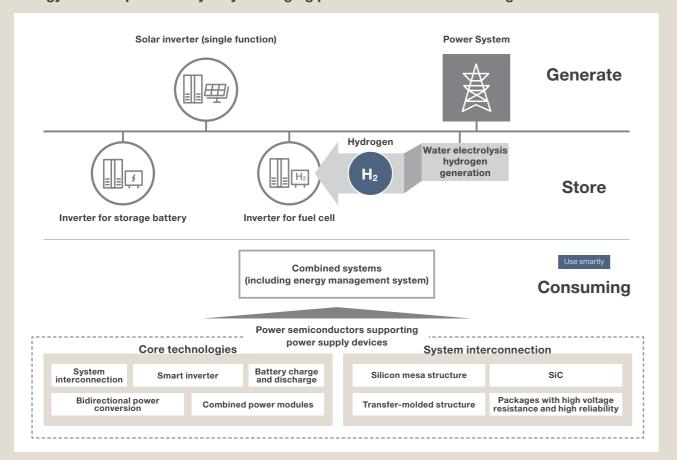
Maintenance and inspections by Sansha Solution Service

The Government of Japan has set the FY2030 greenhouse gas emissions reduction target at 46% (from the FY2013 level) and expressed its determination to keep working to achieve the lofty goal of 50%. The significance of the efforts in the energy conversion sector is increasing, as it is responsible for more than 40% of greenhouse gas emissions. It is particularly necessary to increase the use of sunlight, wind power, biomass and other renewable sources of energy. Announced in April 2021, the Green Growth Strategy set specific goals not only in the area of next-generation renewable energy but also in the storage battery, semiconductor and many other related sectors.

Since our foundation, we have nurtured power source technologies to limit the loss involved in power storage or consumption to a low level. Based on these technologies, we develop solar inverters for power storage systems and fuel cells and other power supply devices. They play significant roles in the creation of a carbon-free society. We also internally produce high-voltage and large-current power semiconductors and high efficiency next-generation compound semiconductor modules. They are core devices supporting the power supply devices above. We are always able to deliver leading-edge technologies

At the Sansha Electric Manufacturing Group, we will continue to provide new technologies and products further by applying technologies that we have continued to cultivate since our foundation to contribute to realizing carbon neutrality by 2050.

# Energy solution provided by fully leveraging power electronics technologies



# **Specific initiatives**

# Development of a system combining storage batteries, fuel cells and a water electrolysis system

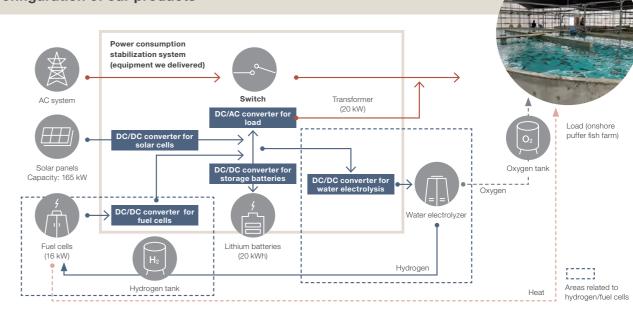
The power consumed in Iki City, Nagasaki (Iki Island) is generated by diesel power generators on the island. Due to the soaring cost of fuel (light oil), transportation and other expenses, it was urgently necessary to replace this method of generating power. Against this background, in FY2021 the Iki City Government began a demonstration experiment of a system using solar power and power from fuel cells with hydrogen generated from sunlight. This project has been implemented at an onshore puffer fish farm.

In this demonstration experiment, we delivered products

including solar inverters, DC/DC converters for fuel cells, DC/DC converters for storage batteries, and DC power supplies for the water electrolysis system.

The solar power and the power generated by converting the power from storage batteries and fuel cells is used to drive the water circulation pump used in puffer fish farming. Oxygen that is electrolytically generated by the water electrolysis system is used to maintain the oxygen level in the aquarium, and the heat generated as a by-product is used to maintain the water temperature.

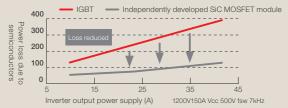
# Configuration of our products



# Contributing to saving energy with SiC **MOSFET** modules

We are working to develop a solar inverter that use hydrogen and build a fuel cell system leveraging the technologies for solar inverters that we have cultivated. This fuel cell inverter has a silicon carbide (SiC) MOSFET power module that we developed and contributes to improving energy efficiency in high-current, high-voltage applications.

# Comparison of power loss of semiconductors



soldering both sides and the use of transfer molding.

# Virtual power plant\* construction demonstration project

We are involved in a virtual power plant construction demonstration project with the goal of achieving unprecedented new energy management to build a foundation for energy infrastructure that will contribute to efficient energy use by society as a whole.

We are considering ideas which will lead to solutions to various

issues in the popularization, expansion and commercialization of renewable energy. Expected achievements have been seen in the demonstration experiments using household storage batteries, industrial storage batteries and electric vehicles as energy sources. We will continue working to optimize energy management for future commercialization.

\*A virtual power plant is a system in which small power generation and storage facilities in many households, office and commercial buildings, factories and others are operated together like a single power plant, instead of constructing a large power plant, by integrating and remotely controlling them using IoT and other information technologies.

# Initiatives for building a decarbonized society advanced together with our partner companies

On November 8, 2022, we signed capital and business alliances with Mitsubishi Heavy Industries, Ltd. and Nitto Kogyo Corporation. We collaborate with the companies to implement decarbonization initiatives, with the goal of enhancing our corporate value.

# Comments from Mitsubishi Heavy Industries, Ltd.

At Mitsubishi Heavy Industries, Ltd. ("MHI"), we set our growth strategy as "Energy Transition" on the energy supply side and "Smart Infrastructure" on the demand side. Our aim is to strongly promote energy conservation, automation, and decarbonization initiatives in these areas contributing to the establishment of a carbon-neutral society.

We have been actively looking for an alliance partner, believing that collaboration with a partner will accelerate such initiative with an eye to the medium-term growth of the business, rather than pushing forward with it on our own. Sansha Electric Manufacturing has world-leading power supply and power semiconductor technologies and has proactively contributed to the establishment of a decarbonized society through highly efficient electric power transformation. This is an important element in the medium-term growth strategy that we have established at MHI, and we believe that Sansha Electric Manufacturing is an essential partner in our efforts to execute this strategy.

We are certain that the power electronics technologies

provided by Sansha Electric Manufacturing will make a substantial contribution to solving social issues as we move toward decarbonization. By leveraging each other's strengths, we can achieve a sustainable, carbon-neutral society globally providing new solutions. With Sansha Electric Manufacturing our mentor in the realm of power electronics, we hope for further strategic collaboration.





# **Comments from Nitto Kogyo Corporation**



Safa Link-One

At Nitto Kogyo, we have set the expansion of our business in the energy management market as an initiative to be pursued in anticipation of decarbonization and the changes in the environment surrounding energy, to achieve continued growth under our long-term vision:

Trust, Technology, and Contribution — A company that creates values and connects electrics and information to tomorrow. We were looking for an alliance partner believing that, to achieve the above, we need to have a partner that shares our orientation, instead of working on our own. At Nitto Kogyo, we believe that the power electronics technologies possessed by Sansha Electric Manufacturing are essential for executing the above initiative. We are certain that the capital and business alliance will enable the two companies, both of which are oriented toward decarbonization, to leverage each other's strengths.

We believe that the power electronics technologies possessed by Sansha Electric Manufacturing are playing a very important role in the realization of a decarbonized society. The Safa Link-ONE- industrial solar self-consumption storage

battery system that Nitto Kogyo has productized is the first product that leverages the strengths of the two companies. It is highly acclaimed by many people. We expect that the two companies will continue to create new products and new solutions leveraging their technologies and strengths and thereby contribute to a decarbonized society.

We hope that the two companies can open up the way to a new era as strategic partners, aiming to achieve sustainable growth and the medium- to long-term improvement of their corporate value.





# Helping solve regional issues with wireless technologies

Chino City, Nagano, where Suwa Sansha Electric Co., Ltd. is located, boasts the rich natural environment at the base of Yatsugatake. This has created social issues unique to Chino City, including the need to watch over mountain climbers and school commuters, the prevention of damage caused by harmful fauna, disaster control, and the introduction of agricultural IoT. To help solve these issues using unique technologies, Suwa Sansha Electric participated in the industry-academia-government collaborative project for the creation of the SUWARIKA Brand during the three years from FY2018 to FY2020.

Among these issues, in mountainous areas, flood damage is becoming more frequent every year with the rising risk of the flooding of small rivers. In Japan, a flood-prone country, there is strong demand for the measurement of river and lake water levels. Water gauges have already been installed in government-managed rivers and the data from them is transmitted wirelessly. However, these gauges have yet to be installed in small rivers.

A compact, lightweight, high-precision, low-cost water gauge was developed as a SUWARIKA Brand product. In this project, Suwa Sansha Electric developed a wireless transmission board for the IoT device. The transmission board is equipped with a GPS. It is capable of transmitting location information

and information from the sensors connected to it. It is used to accurately predict river water levels and to monitor water levels, such as the detection of abnormal phenomenon caused by mudslides. At present, the water gauges are operating in the Chino and Suwa areas.

A demonstration experiment is under way for using these technologies for weather observation and crime prevention in the future



/atsunatake



What is the industry-academiagovernment collaborative project for the creation of the SUWARIKA Brand? The project was created by the government of Chino City, Nagano to address the population decline, the low birthrate and the aging of the population. With Suwa University of Science playing a central role, the goal of this initiative is to solve various administrative and regional issues by integrating advanced manufacturing technologies with the Low Power Wide Area (LPWA) wireless transmission technology for leading-edge IoT devices.

Developing strengths (invisible assets)

Picturing the desired future

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

# Area-specific strategy

# Global expansion of the Sansha Electric Manufacturing Group

In 1983, we established two subsidiaries: SANREX CORPORATION in the US state of New York and SANREX LIMITED in Hong Kong. We then opened sales bases in Singapore in 1999 and in Shanghai, China in 2001 to expand our overseas sales operations. In 1994, we opened a base manufacturing power supplies in Guangdong Province in China to push ahead with local production for local consumption in China. To continue our overseas expansion, we set up branches in Helsinki, Finland, Seoul, South Korea and Taipei. Taiwan in 2017. We are expanding our business globally with the medium- to long-term target of increasing the ratio of overseas sales to around 50%.

# Ratio of overseas sales





# China

3

While its economy is slowing slightly at present, China remains one of the world's top economic powers. This market is expected to continue growing sustainably. Above all, this is the market leading the world in both the production and sale of EV-related products, and the expansion of peripheral industries is also remarkable. Therefore, we believe that our power semiconductors and power supplies can contribute across a wide area. At the Sansha Electric Manufacturing Group, we have manufacturing and sales bases in China. We are leveraging this advantage to enhance local production for local consumption.

# Power semiconductor business

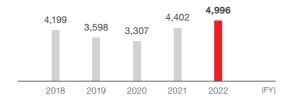
In addition to selling discrete semiconductors and other products, we will focus our efforts on expanding the adoption of SiC semiconductors in the induction heating industry and in wireless chargers and other products.

Regarding Made in China 2025, we will continue to strive to collect information from dealers and industries.

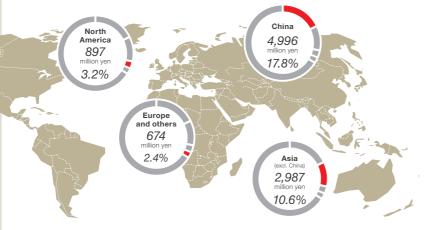
# **Power supply business**

We will expand sales focusing mainly on power supplies for surface treatment and welders. We believe that this requires the expansion of sales channels. In FY2023, we will expand our dealer network by using various methods to approach dealers and push forward with the development of new applications and new customers.

# Net sales trend (in million yen)



# Our bases around the world and sales ratios (FY2022)



# Europe

In Europe, there are many major manufacturers in industries to which our products can contribute, including the inverter, welder and induction heating industries. We plan to expand sales by proposing products to these manufacturers.

Further, interest in environmental issues is high in Europe compared with other regions of the world, so we will consider our potential to contribute in areas such as decarbonization, renewable energy, and hydrogen.

# **Power semiconductor business**

To expand sales of SiC semiconductors, we plan to expand to new industries while also strengthening sales in existing industries.

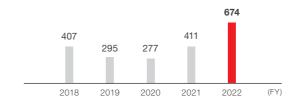
# **Power supply business**

We will consider our products' potential to cater to customer needs in Europe, the main market related to hydrogen, which is a new energy source attracting attention globally.

At an exhibition World hydrogen 2023 (Netherlands)

# SanRe

# Net sales trend (in million yen)



# Asia (excl. China)

While many Japanese companies have manufacturing bases in Southeast Asia, we have established a certain market share of the power supplies for surface treatment in Thailand in particular. Moving forward, we will strengthen sales promotional activities targeting local companies in our efforts increase our market

While India is still a developing market for the Group, we believe that the cultivation of the Indian market will be key for our overseas business because India is among the world's top economic powers, just like China. In FY2023, we will continue to promote and accelerate our existing activities to cultivate the Indian market.

# **Power semiconductor business**

We will work to expand sales of SiC semiconductors for electric buses and the induction heating industry by positioning the products as the second pillar following the Triac semiconductors that are our mainstay products.

# **North America**

Capital investment in the manufacturing industry has been trending toward a slowdown at present. In addition, there has been an impact from economic policy directed at China. However, we believe that North America is the central market that will lead the global economy. At the Sansha Electric Manufacturing Group, we will take a niche strategy instead of expanding sales in all directions, aiming to increase our shares of specific markets.

## **Power semiconductor business**

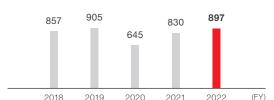
We will promote an industry-academia collaboration as a new initiative. Working together with a university in the United States, we will examine and horizontally expand example applications for our semiconductors. We also plan to exhibit at US nationwide trade shows to increase our visibility and acquire new customers.

# **Power supply business**

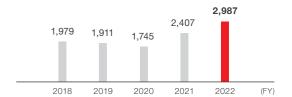
We will enhance our lineup of weldingrelated products and work to expand sales channels. We also plan to actively exhibit at US nationwide trade shows to increase our visibility and acquire new customers.

Welder for

# Net sales trend (in million yen)



# Net sales trend (in million yen)



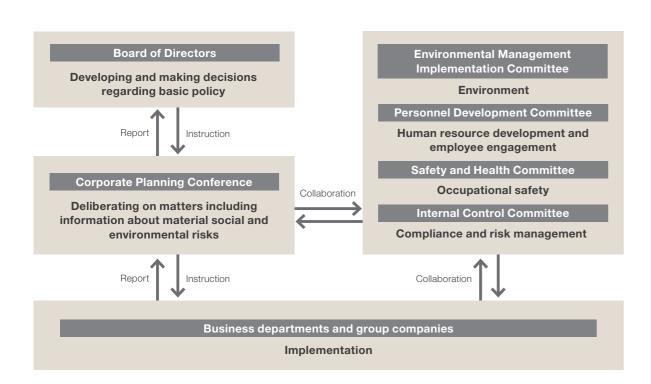
# **Power supply business**

It is expected that power supplies for surface treatment, mainly power supplies related to automobiles, will continue to be in demand. We will promote measures to strengthen relationships with existing customers and find new customers.

problems and it is necessary for companies to implement initiatives for building a sustainable society, the Sansha Electric Manufacturing Group will help solve social issues through its businesses, such as the development of products using power electronics and creativity, in its efforts to improve its corporate value and establish a sustainable society. We will behave in a manner that fully considers the impact of the Group's business activities on society and the global environment. We will strive to earn the trust of stakeholders.

# **Promotion structure**

The Group understands that actions to address sustainability issues are a priority management issue from the perspective of increasing corporate value over the medium and long term. The Board of Directors determines the basic policy and the Corporate Planning Conference discusses specific actions and studies measures. Related committees collaboratively implement individual measures with other internal committees.



Evaluation analysis for achieving the vision

repeatedly evaluating and improving

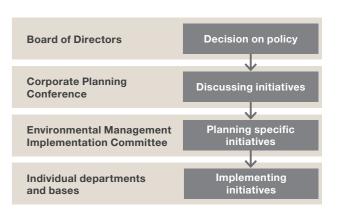
# Tackling the climate change problem — Reducing environmental impact

At the Sansha Electric Manufacturing Group, we are accelerating activities to protect the global environment, believing that the conservation of the global environment is a duty that must be fulfilled for the good of future generations and the reduction of the environmental impact of business activities is one of the Group's most important tasks.

# Environmental management system

The Board of Directors determines the basic policy on environmental initiatives and the Corporate Planning Conference, which is attended by the President and Executive General Managers, discusses specific actions and studies measures. Specific initiatives related to environmental protection and energy conservation are planned by the Environmental Management Implementation Committee, which meets regularly. The plans are discussed at the Corporate Planning Conference and decisions on them are made by the Board of Directors.

The Environmental Management Implementation Committee is composed of managers from individual departments and bases, and the Quality and Environment Planning Department acts as the administrative office for this committee.



Reduction of hazardous

substances

We will work to reduce emissions of

# Sansha Electric Manufacturing Group Environmental Policy

The Group is aware that conservation of the global environment is a corporate social responsibility. We will work to reduce environmental impact and consider biodiversity to aid the realization of a sustainable society

Observance of environmental laws and regulations

We will observe environmental laws and regulations and meet equivalent requirements

Consideration of biodiversity

All our personnel will be aware of importance of conserving biodiversity and act in due consideration of it.

conservation

Prevention of global

We will work to reduce greenhouse gas emissions from business activities.

Reduction of the environmental impact of products

We will always strive to create environmentally-friendly product designs to provide products with little environmental impact throughout their life cycle.

Contribution to a recycling-oriented society

We will strive to minimize waste

and efficiently use resources to substances that adversely impact the aid the realization of a sustainable environment and to prevent pollution. recycling-oriented society.

Continuous improvement of the environmental management system

We will be aware of impact our business activities and products have on the environment and work to continuously improve our environmental

# Observance of environmental laws and regulations

We understand the laws and regulations that apply to group companies as well as those that we should observe, and evaluate compliance regularly to ensure laws and regulations are observed.

At the Sansha Electric Manufacturing Group, there were no violations of environmental laws or regulations in FY2022. We will continue to strive to ensure proper control.

# ISO14001 certifications we have acquired

Certification body	Japan Quality Assurance Organization	
Registration number	Semiconductor Manufacturing Division Power Supply System Manufacturing Division	JQA-EM7548 JQA-EM7051
Date of registration	Semiconductor Manufacturing Division Power Supply System Manufacturing Division	June 28, 2019 February 14, 2014

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

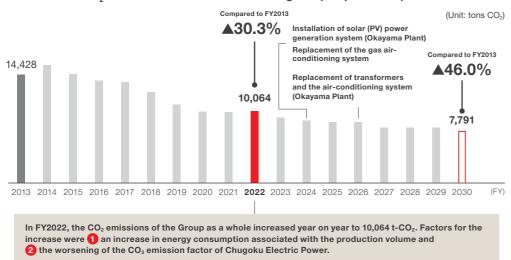
# Towards carbon neutrality in 2050

At the Sansha Electric Manufacturing Group, we recognize the importance of constantly lowering  $CO_2$  and waste emissions from production activities. Based on this understanding, we set the following goals in FY2021.

Reduce the CO<sub>2</sub> emissions of all group companies 46% by 2030 (Compared to FY2013)

Achieve carbon neutrality by 2050

# Reduction of CO<sub>2</sub> emissions — Achievements and goals (Scope 1 and 2)



We are planning to make capital investments to accelerate the reduction of  $CO_2$  emissions.

- Installation of solar (PV) power generation system at the Okayama Plant
- Replacement of the gas air-conditioning system at the headquarters with an electric system
   Replacement of the air-conditioning system at the Okayama Plant

addition and revision of reduction items based on the latest environmental technologies.

In addition, to set a reduction target for Scope 3 CO<sub>2</sub> emissions, we are working to understand the current situation.

Further, we plan to reduce emissions by promoting initiatives

department, the company-wide improvement of efficiency, and

including process improvements in the manufacturing

# Achieving a departure from fossil fuels

The Okayama Plant accounts for approx. 80% of the entire Group's total power consumption. At the plant, we have replaced the lighting system with an LED lighting system and introduced an Energy Management System (EMS). In addition, of two cleanroom buildings (Buildings A and B) that consume huge amounts of electricity because of the strict air-conditioning management that is required, we improved the efficiency of Building B's outside-air-processing air conditioners by renovating the existing heat source equipment (cold water chiller and steam boiler) to use a high-efficiency, air-cooled heat pump chiller and

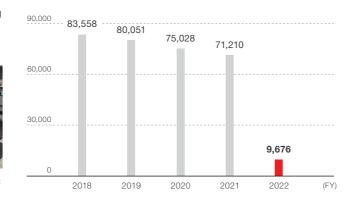
we also introduced variable flow control. Further, we have begun to use waste heat from production equipment to preheat and reheat outside air and we adopted a dry fog system for humidity control, which has led to the termination of steam humidification, which was the greatest challenge.



High-efficiency air-cooled modular chiller at the Okayama Plant

We have expanded these initiatives to Building A. In FY2022, we achieved a departure from fossil fuels by renovating the air-conditioning heat source equipment for the cleanrooms of Building A.

# Heavy oil consumption at the Okayama Plant (liters)

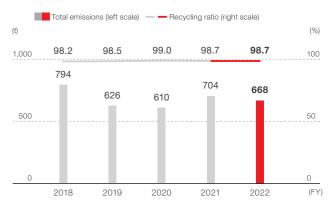


# **Environmental initiatives**

# Waste reduction achieved by ending the use of plastic packing materials

Our plants have been using reusable shipping containers and taking other actions in an effort to minimize waste emissions from business activities and to reduce packing materials and cushioning materials. In the future, at the Okayama Plant, we will successively replace plastic packing materials with cardboard for new products in a bid to reduce plastic consumption.

# Waste emissions and recycling ratio



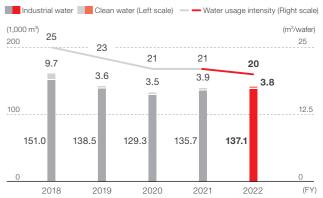
The data covers Sansha Electric Manufacturing Co., Ltd. and its group companies based in Janan

# Efforts to efficiently use water resources

In recent years, we have seen various problems related to water occur, including water shortages attributed to droughts associated with climate change and flooding damage. The semiconductor manufacturing process necessarily consumes a vast amount of pure water for the removal of etching and cleaning chemicals and the cooling of equipment. At the Okayama Plant, we are striving to reduce water consumption by setting a reduction target for water consumption per wafer production volume, with the goal of promoting the efficient use of water resources.

In FY2022, water consumption increased due to the increase of production volume, but consumption per wafer decreased.

# Water consumption



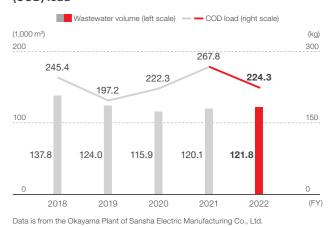
Data is from the Okayama Plant of Sansha Electric Manufacturing Co., Ltd.

# Initiatives for controlling water quality

Our Okayama Plant runs wastewater treatment facilities to purify the wastewater from the manufacturing process and discharge treated wastewater that fulfills our standards which are more strict than specified in laws and regulations. To control wastewater contamination, we are working to reduce and detoxify hazardous substances and to collect non-detoxifiable hazardous substances. We also inspect water quality regularly and monitor wastewater quality.



# Wastewater volume and chemical oxygen demand (COD) load



Wastewater treatment facilities at the Okayama Plant

Happiness and Stability for Employees is part of the Sansha Electric Manufacturing Group's corporate philosophy. We believe that our staff's happiness is one of the most important parts of our business's foundation for corporate growth and development. Additionally, we are convinced that personnel who think and act independently are essential for the Group's continuous growth. We are focused on increasing employee independence.

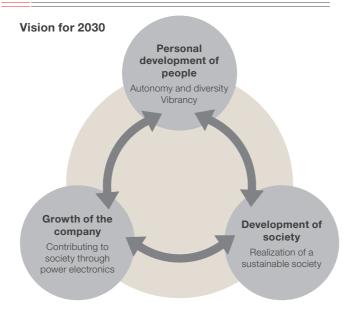
Under the basic policy that states the personal development of people is equal to the growth of the company, we are creating an organizational climate in which employees help themselves and each other develop and workplaces where they can work vibrantly, aiming to simultaneously achieve the personal development of employees and the growth of the company.

# Personnel management for continuous growth

In 2021, the Sansha Electric Manufacturing Group began to push forward with medium- to long-term initiatives to achieve its 2030 vision, which consists of three pillars: the development of the next generation of employees, employees that are experts in technology and employees that are able to work actively in global markets, the promotion of diversity and the creation of an organization and climate.

# **Required qualities**

- Independent thinking and acting
- Have a can-do spirit
- Communicate with a wide variety of people
- Eager to learn and very curious



# Three pillars

Personnel development	Promoting diversity	Creation of organization and climate			
Policy	Policy	Policy			
In an era where reform is required, we will continue working to develop personnel with broad perspectives and diverse experiences, being capable of directing our businesses in the future.	To create an organization where diverse human resources can work vibrantly, we will push forward with initiatives to promote the active participation of female employees, achieve a diverse employee population and enable employees to achieve a healthy work-life balance.	We will push forward with the creation of a system that leads to increased motivation as well as personal development and a climate which enables people to take on challenges without fear of failure.			
Priority measures	Priority measures	Priority measures			
1 Cultivating next-generation executives and leaders	Promotion of active participation of female employees. Securing development	Promoting projects focused on young and mid-career employees			
2 Rebuilding programs to develop skills and professional abilities	opportunities in view of promotion to managerial positions and building a system which will enable female employees to	2 Creating opportunities to interact with other companies			
3 Building a foundation for human resources to develop future global leaders	continue to actively participate over the long term	3 Holding meetings to exchange opinions with management			
	2 Proactively promoting mid-career employment				

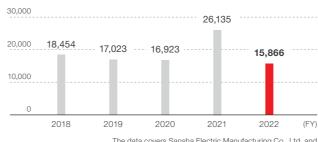
Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

# Personnel development

In an era where reform is required, we will push forward with initiatives including the implementation of educational and training programs to continue to develop personnel with broad perspectives and diverse experience who are capable of leading our businesses in the future. In addition, we will enhance the personnel development system, including job-class-specific training programs, in our efforts to reinforce our human resources foundation. At the same time, we will implement

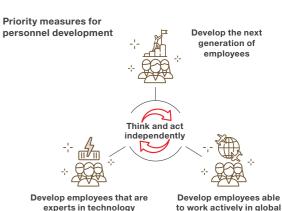
# Training expenses per employee (Yen)



The data covers Sansha Electric Manufacturing Co., Ltd. and its group companies based in Japan.

initiatives for the quick development of young human resources and retaining those human resources in a well-planned manner

During the medium-term management plan, we will emphasize the continued development of technology, the development of the engineering personnel who innovate, and further, the hiring of non-Japanese nationals and the development of global leaders who will take charge of overseas-related duties to accelerate the global expansion of our business.



# **Education and training systems**

	Rank-specific traini and promotion train		Global huma resources	n	Technological human resources Specificatori skil		ries or		onnel Jement	partici of fe	tive ipation male oyees	per	orting sonal opment	for	ning r all onnel
Management	Training for senior managers  Newly appointed Deputy General Managers  Newly appointed Managers	Personnel assessment			Technology management			Personnel management	Evaluation personnel	Tolliono	Promotion				
Leaders	Personnel eligible for promotion  Initial-level leaders			Language skill acquisition support program	Technical skills	Rank-specific training in factories	Professional training at individual factories	Mento		or active participation	of active participation	Acquisition of public qualifications	Distance learning	Corporate Philosophy	Ethics and compliance
Associates	Increasing motivation of young employees  Personnel in their second and third year of services  Follow-up  New employees	nd	Overseas trainee - program  Overseas business experience program	support program	Basic technologies	j in factories	lividual factories	Mentors for new employees			ale employees	qualifications	ning		



Developing strengths (invisible assets)

Picturing the desired future

Evaluation analysis for achieving the vision

repeatedly evaluating and improving

# **Promoting diversity**

## Promotion of active participation of female employees

The group takes various steps to enable the women we employ to develop. This includes skill development training for women employees, encouraging a shift in the mindsets of personnel including those supervising women, and job rotation to enable women to work in broader fields. We are striving to construct an environment that is friendly to our workers who are women by interviewing people taking childcare leave before returning to work, implementing a system of reduced working hours measured by the minute, and making it possible to take nursing care leave on an hourly basis. As a result of these actions, we received three-star Eruboshi certification in 2021.

Under this certification program, the Minister of Health, Labour and Welfare certifies companies developing and submitting notification of their plans of action in accordance with the Act on the Promotion of Female Participation and Career Advancement in the Workplace and applying to

prefectural labour bureaus that meet predetermined criteria and are engaged in outstanding efforts for the advancement of women. In addition to the above, we were certified as a Leading Company with Actively Participating Women in Osaka-shi (two stars) and certified under the Shiga Prefectural Government's program certifying companies that enable women to advance their careers (two star).







# Action plan based on the Act on the Promotion of Female Participation and **Career Advancement in the Workplace**

# Period

# Targets and initiatives

## From April 1, 2022 to March 31, 2025

# Target 1: Increase the percentage of new graduates recruited that are women to 20% or higher

- Increase recruitment activities conducted by employees that are women
- · Actively distribute information about the good performance of employees that are women
- our workers who are women (including the percentage of people using the childcare leave system

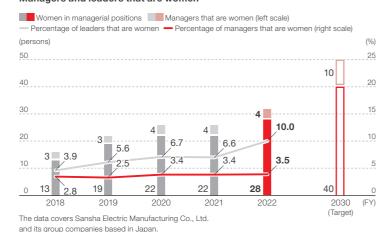
## Target 2: Control the average overtime working hours of regular employees to 15 hours or less per month

- Check the actual overtime working hours every month based on internal rules
- Control overtime working hours properly by using the attendance management system
- Promote the appeal of the environment that is friendly to Provide labor management training to managers

To develop leaders that are women, we are reforming awareness and providing training for acquiring skills and expertise to exercise leadership. Regarding the promotion of women to managerial positions, we will set targets and create opportunities to interact with external people to implement initiatives such as increasing their career awareness and enabling them to develop their management skills.

To promote diversity, we will create teams where managers leverage the diversity of their teams and recognize personal qualities, while continuing to provide training for the development of human resources and provide opportunities to learn the mindset.

# Managers and leaders that are women



# Appointment of foreign nationals to managerial positions

One non-Japanese officer was appointed at a subsidiary. There are 46 non-Japanese managers in the Group as a whole, and one of them has been promoted to the position of General Manager of a branch. No target has been set at

# Appointment of mid-career hires to managerial positions

The percentage of active employees that were hired mid-career is 42.2%, with 37.4% of managers having been hired mid-career. We believe that these percentages meet certain standards. The Group will continue to proactively hire employees through

# **Employment of persons with disabilities**

The Group proactively employs workers with disabilities. We assign duties suited to their unique characteristics to ensure that every one of them can work without worries and that they are able to display their strengths as a valuable part of our workforce.

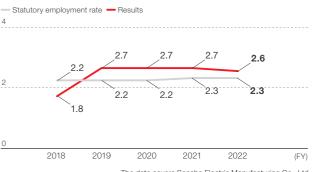
To move forward with the employment of workers with disabilities, we are organizing plant tours for institutions providing employment support for people with disabilities and hiring interns from these institutions. In addition, we are working to help staff acquire qualification as Working Life Counselors for Persons with

In 2022, the Shiga Plant was commended by the prefectural governor as an excellent place of business for the employment of people with disabilities.

# present concerning the promotion of non-Japanese employees to management positions. However, the Group is implementing initiatives to secure and develop globally competitive human resources with the goal of expanding business overseas.

mid-career recruitment activities and maintain the percentage of all employees hired mid-career at 40% or higher and the percentage of managers hired mid-career at 35% or higher.

# Percentage of employees with disabilities (%)



The data covers Sansha Flectric Manufacturing Co., Ltd. and its group companies based in Japan.

# Developing an environment where diverse employees can demonstrate their capabilities

# Work-life balance

We continuously strive to ensure that working hours are properly managed and to reduce the amount of overtime worked. We are improving the working environment to provide a foundation for all employees, irrespective of gender, to establish a healthy worklife balance. Programs we have introduced include an annual

leave saving program that allows employees to take expired annual paid leave for medical treatment and nursing care and a commemorative event leave program that encourages workers to take holidays for their preschool children's birthdays and other

Systems	Details			
Scheduled annual leave Every year, employees plan to take three days of annual leave in the first half and three days in the second and improve work-life balance.				
Commemorative event leave	Employees with pre-school children are entitled to set their children's birthdays as days for taking commemorative event leave.			
Hourly annual paid leave and half-day annual paid leave	With an upper limit of five days per year, employees are allowed to take annual paid leave on an hourly basis. Annual paid leave may also be split into half days, the morning and the afternoon.			
Accumulated annual leave	Employees are allowed to take expired annual paid leave for purposes related to medical treatment/nursing care, sick family care, support for disaster-affected areas, social welfare activities, and others.			



Developing strengths (invisible assets)

Male Female

Picturing the desired future

Evaluation analysis for achieving the vision

Developing strategies, acting and repeatedly evaluating and improving

## Male employees' use of childcare leave

At the Sansha Electric Manufacturing Group, the number of male employees taking childcare leave has been gradually increasing. To further increase their use of this leave, we inform employees thoroughly of the childcare leave program, ask superiors to encourage their subordinates to take leave, individually explain the program to eligible employees, and implement other initiatives, thus continuing efforts to build an environment which facilitates the use of childcare leave.

In recognition of the initiatives being implemented to create an environment that enables employees to establish

a healthy work-life balance, such as promoting the use of annual paid leave to encourage employees to use it to ensure they are refreshed, in addition to the measures above, the Group was granted Kurumin certification by the Ministry of Health, Labour and Welfare on August 26, 2022.

# 

Number of employees taking childcare leave (persons)

The data covers Sansha Electric Manufacturing Co., Ltd.

# Support for return from childcare leave

We ensure that employees wishing to resume working after childcare leave consult with their superiors to enable their smooth return to the workplace.

This is meant to remove anxiety about the return and

# Occupational health and safety

Our top-priority task is to establish a safe, healthy and sound workplace environment that enables employees to work happily. At the Sansha Electric Manufacturing Group, Safety and Health Committees have been established with the goal of ensuring occupational safety and health, maintaining the good health of employees and maintaining and improving workplace environment management. The Safety and Health Committees meet every month at the headquarters and at each plant. The committees

facilitate their superiors' understanding of their worklife balance. Through this, we strive to create a working environment that enables employees to establish a healthy balance between childcare and their career.

study the prevention of the recurrence of occupational accidents using a risk-based approach, perform safety patrols and implement other initiatives to enhance occupational safety and health. In addition, every year we hold a safe driving workshop taught by local police officers to prevent traffic accidents. We also have local firefighters teach a workshop on the use of automated external defibrillators (AEDs) to save lives.

# Sansha Electric Manufacturing Group Safety and Health Policy

The Sansha Electric Manufacturing Group positions safety and health initiatives as one of its most important tasks. Each one of its employees will work proactively to create a safe, comfortable workplace and achieve good physical and mental health based on their understanding that safety and health form the foundation of management, aiming for zero accidents and zero disease.

- Comply with laws, regulations, and internal rules related to safety and health.
- 2 Work proactively on initiatives such as creating a safety-first workplace environment, maintaining employee health and ensuring appropriate working hours.
- 3 Strive to increase awareness of safety and health by ensuring good communication and implementing employee training and internal PR
- 4 Proactively push forward with initiatives to prevent accidents and respond to emergencies to ensure the security and safety of employees and local communities

# Sound labor-management relationship

The company and the Sansha Electric Manufacturing Labor Union are implementing many measures to achieve the sound development of both the company and the union while respecting each other's position.

The management and the labor union discuss salary, benefits package, and other labor conditions on an equal footing, confirming with each other that the company understands that the labor union has the right to act based on the labor agreement and related laws and regulations to maintain and improve labor

conditions and improve the economic standings of the union's members which is their basic right, and the company respects the rights of the union.

In addition, meetings of the company-wide management council, the branch management council at each base, and other organizations are held regularly to share information and exchange opinions to enable the smooth operation of businesses and maintain and improve the work environment based on mutual understanding and relationships of trust and cooperation.

# Creation of organization and climate =====

We believe that all employees should fulfill the corporate philosophy, purpose, vision, and other statements and we are implementing initiatives leveraging various opportunities that start when an employee joins the company to ensure they are instilled and established.

The AC Cafe sessions for exchanging opinions with the President started as a new initiative in FY2023, reflecting the President's desire to listen directly to employees while sharing his thoughts and purpose with them.

The AC Cafe sessions are not held only at the headquarters. The President visits plants, branches, sales offices and group companies to hold AC Cafe sessions in a relaxing atmosphere over coffee. Each session is held with a group of seven or eight

employees and lasts for approx. one hour. Talking about hobbies and sports in addition to work, the President exchanges opinions with employees in a casual atmosphere. Thus, the sessions serve as valuable opportunities for the President to build a sense of unity with the employees.

As of August 31, 2023, the President has talked with 27 groups (195 employees). According to the questionnaire survey conducted after each session, many participants felt that they had enjoyable and meaningful time and reaffirmed the importance of communication.

Moving forward, the President plans to talk directly with all employees during FY2023 and FY2024.

# AC Cafe

The Group's strengths are in technologies for converting *chokuryu* (direct current, or DC) electricity into *koryu* (alternate current, or AC) electricity and vice versa. The name AC Cafe reflects the Group's determination to be good at *koryu* (which can also means "interaction") between people as well.



# **Corporate governance**

# **Directors, Audit & Supervisory Board Members** (as of June 28, 2023)

## Directors

# Hajimu Yoshimura

Has rich experience cultivated as the president of a group company of a major Japanese electronics manufacturer and vice president of an overseas subsidiary in the same group, among other positions. Since assuming his position as our company's Representative Director & President in 2018, he has been using his rich experience, broad knowledge, and strong leadership to drive the growth strategy and managerial reforms.

Serving as director for Status of attendance at Board of Directors' meetings 24,600 shares of our stock

# Masaki Fujiwara

Director, Vice President and Operating Officer Executive General Manager of Corporate Planning

Has rich experience and broad knowledge based on his service in various positions mainly the areas of management and accounting in the group companies of a major Japanese electronics manufacturer and as a director at an overseas subsidiary of the same group. Since appointed as a Director in June 2014, he has been in charge of the administrative department and the corporate planning department. In April 2023, he was appointed as Director, Vice President and Operating Officer.

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Status of attendance at	
Board of Directors' meetings	14/14 meetings
Owning	16,000 shares of our stock

# Hiroshi Zumoto

Director and Senior Managing Operating Officer COO of Power Supply System Executive General Manager of Power Supply System Manufacturing Division

Has been engaged in productivity improvement and the strengthening of the production system for many years as a person responsible for production technologies. He began to hold important positions in the semiconductor business in 2012. He has been controlling the semiconductor business since his appointment as Director in June 2021 and controlling the power supply business since April 2023.

Serving as director for	2 years
Status of attendance at Board of Directors' meetings	14/14 meetings
Owning	9,100 shares of our stock
Status of important concurrent Chairman of the Board, SANRE Chairman of the Board, SANSH (GUANGDONG) CO., LTD.	X LIMITED

# Hajime Katsushima

Director and Managing Operating Officer COO of Semiconductor Executive General Manager of Engineering Research and Development Division

Worked for many years in research and development to develop products in the new energy sector. In November 2016, he was appointed representative director and president of a subsidiary to engage in corporate management. He has been controlling the power supply business since April 2021 and controlling the semiconductor business and serving as the Executive General Manager of the Engineering Research and Development Division since April 2023.

Serving as director for Status of attendance at 11/11 meetings Board of Directors' meetings 12,100 shares of our stock Chairman of the Board, Sansha Electric Manufacturing

# Akira Uno

Independent Outside Director

Has advanced knowledge of financial affairs due to his work experience at a financial institution. In addition, at the meetings of our company's Board of Directors, he takes advantage of his rich experience and advanced knowledge cultivated through his service in positions, including outside director of a listed company, to fulfill the decision-making and supervisory functions of the Board, such as identifying issues and giving advice about the Group's growth strategy and managerial reforms. Since November 2019, he has been the chairman of the Nomination and Compensation Committee. The Company has registered him as independent officer with the Tokyo Stock Exchange.

Serving as director for status of attendance at Board of Directors' meetings 14/14 meetings 11,500 shares of our stock

Outside Director, Hashimoto Soqvo Holdings Ltd. Fellow, School of Business at Graduate School of Economics, Kyoto University (Doctor of Economics) Senior Executive Fellow, DMG Mori Co., Ltd.

# Koichi Ina

Independent Outside Director

Possesses advanced knowledge of production technology and research and development since he worked in the management team of a leading automobile manufacturer in Japan and as an engineer in factory management. At the meetings of our company's Board of Directors, he takes advantage of his knowledge to fulfill decision-making and supervisory functions of the Board, such as identifying issues and giving advice about the Group's growth strategy and managerial reforms. Since November 2019, he has been a member of the Nomination and Compensation Committee. The Company has registered her as independent officer with the Tokyo Stock Exchange.

Serving as director for Status of attendance at Board of Directors' meetings 14/14 meetings

26,400 shares of our stock Outside Director, Kubota Corporation

# **Audit & Supervisory Board Members** Ichiro Kitano

Audit & Supervisory Board Member (Full-Time)

He has an abundance of working experience and knowledge after long serving as a person responsible for product design and the manufacturing of power supplies. Since being appointed an Audit & Supervisory Board Member in June 2016, he has been making appropriate suggestions based on his experience and knowledge and conducting on-site inspections to help improve the effectiveness of the Audit & Supervisory Board's auditing as a whole.

Serving as director for Status of attendance at Board of Directors' meetings 14/14 meetings Status of attendance at Audit & Supervisory Board meetings 5,200 shares of our stock Audit & Supervisory Board Member, Sansha Solution

Service Co., Ltd. Audit & Supervisory Board Member, Suwa Sansha Electric Co., Ltd.

# Kazuhiro Egawa

Independent Outside Audit & Supervisory Board

Leverages many years of experience as a lawyer and advanced knowledge he has cultivated as a legal professional to appropriately advise the Board of Directors from an expert viewpoint. He also visits and inspects subsidiaries and business facilities in his efforts to assess their situations. While Mr. Egawa is a lawyer, he has not concluded an advisory contract with our company. Therefore, our company pays him no money other than the compensation for officers. The Company has registered her as independent officer with the Tokyo Stock Exchange.

Serving as director for Status of attendance at Board of Directors' meetings 14/14 meetings Status of attendance at Audit & 14/14 300 shares of our stock Ownina Head of Eiwa Law Office

# Eriko Nashioka

Independent Outside Audit & Supervisory Board Member

Has great experience and advanced knowledge about finance and accounting as a certified public accountant. She is also a licensed tax accountant. She worked as a member of the Environmental Accounting Technical Committee under the Management Study and Research Committee of the Japanese Institute of Certified Public Accountants and several committees of the Ministry of the Environment and the Ministry of Economy, Trade and Industry. She appropriately advises the Board of Directors from an expert viewpoint. She also visits and inspects subsidiaries and business facilities in her efforts to assess their situations. The Company has registered her as independent officer with the Tokyo Stock Exchange.

Serving as director for Status of attendance at Audit & Supervisory Board meetings 1,000 shares of our stock Outside Director (Audit and Supervisory Committee Member), FUKUSHIMA GALILEI CO, LTD., Ltd.; Outside Audit & Supervisory Board Member, OSAKA GAS CO., Ltd., Representative Director, Institute for Environn Management Accounting, Head of Nashioka Accounting Office

# Skill matrix

			Knowledge and experience particularly expected by the Company									
		Independence	Corporate management and management strategy	Overseas business experience	Business strategy	R&D and production	Finance and accounting	Legal affairs and compliance				
Directors	Hajimu Yoshimura		•	•	•	•						
	Masaki Fujiwara		•	•	•		•					
-	Hiroshi Zumoto		•		•	•						
-	Hajime Katsushima		•		•	•						
-	Akira Uno	•	•				•					
-	Koichi Ina	•	•			•						
Audit & Supervisory Board Members -	Ichiro Kitano			•	•	•						
	Kazuhiro Egawa	•	•					•				
=	Eriko Nashioka	•	•				•					

Skills for ensuring the effectiveness	
of the Board of Directors	

Reasons for selecting skills

Skill requirements

Overall business	Corporate management and management strategy	Requires management experience and achievements in corporate management and the formulation and promotion of management strategies to realize the Group's growth strategy	Management experience as a representative director or officer in a company			
management skills	Overseas business experience	Requires overseas business management experience, and knowledge and experience of an overseas business environment to respond to global business development	Experience as a representative of overseas subsidiary, head of overseas business division, or executive officer			
Business core skills	Business strategy	As the Company's business area is a niche and highly specialized market based on power electronics technology, this position requires a high level of knowledge in such area as well as experience in executing business strategies	Executive in charge of business division, head of division and person with equivalent experience as senior management			
	R&D and production	Requires knowledge and experience to develop safe, secure, and high- quality products and realize integrated production from design to production	Executive in charge of R&D and production division, head of division and person with equivalent experience as senior management			
Functional	Finance and accounting	Requires accurate financial reporting, efficient management of invested capital, and knowledge and experience to enhance shareholder returns	Executive in charge of accounting and finance division, head of division, person with equivalent experience and person with experience in auditing firm, etc.			
core skills	Legal affairs and compliance	Requires knowledge and experience in legal affairs and compliance fields to ensure effective corporate governance and improve the effectiveness of the Board of Directors.	Experience as executive in charge of legal affairs and compliance, head of division, and person with experience in a law firm, etc.			





# What they expect of us and our issues

We interviewed the two Outside Directors and asked them to talk about what they expect of the Sansha Electric Manufacturing Group, what issues the Group is facing and other topics. We also asked them about key points of Board of Directors discussions of the introduction of the performance-based stock compensation plan that was announced in May 2023.

# — What roles should Outside Directors play?

**Uno:** Directors are appointed by shareholders. To put it in extreme terms, Outside Directors exist to serve the interests of shareholders. I believe that we Outside Directors play a role in giving advice and recommendations from the viewpoint of shareholders. Because I have long been involved in the management of a financial institution, I am conscious of financial perspectives in particular when making remarks at the Board of Directors' meetings.

**Ina:** Because you are a finance professional, your perspective is a little different from mine, isn't it? I myself learn a lot from your recommendations and opinions, Mr. Uno.

**Uno:** Thank you very much. I also learn a lot from your perspective as a production professional, Mr. Ina.

Ina: I make statements regarding the improvement of production efficiency and manufacturing based on my own experience.

I also believe that shareholders entrust a company with capital

and employees entrust a company with their lives. In a company, the Board of Directors is an extremely important decision-making body. Of course, I carefully watch the flow of money, but I also try to be conscious of employees' viewpoints. I believe that we also have a duty to think deeply about employees working on site when we are making decisions, such as asking ourselves, "How will employees feel about the direction this company is going?" and "What impact will our decision have on the employees working on site?"

 Evaluation of CG23, the medium-term management plan aimed at achieving the vision

Ina: I want to praise the company for achieving its major financial indicators, such as net sales. On the other hand, CG23 is a medium-term plan aimed at achieving the Global Power Solution Partner long-term vision. To achieve the vision, we need to change our existential value. It is a great change, involving the shift from the idea of selling products to being a partner who

solves issues. We are still half way to achieving this point. I think that we should devise more measures, even small ones, starting from planning (upstream).

Uno: You are right. At the meetings of the Board of Directors, we receive many reports, but I sometimes feel that PDCA is not implemented successfully. Some indicators were nearly achieved, but in the end, they were not achieved. I want the organization to steadily implement the PDCA cycle to be able to achieve plans consecutively. In particular, I think that productivity and efficiency can be improved.

Ina: As you pointed out, I think that there is room for improvement in inventory control and quality control, among other aspects. Above all, reviewing (Check) is the most important part of PDCA. ROA should be higher if reviewing is uncompromisingly implemented. I feel that a good point of the company's employees is that they are very earnest and work on improvements with a sense of urgency. Things will definitely be better if they implement the PDCA cycle surely and repeatedly improve.

# Discussion about the introduction of a performance-based stock compensation plan for officers

Uno: I also serve as the chairman of the Nomination and Compensation Committee. We discussed the introduction of this plan for about a year. After deciding the outline of the plan, we spent time checking for negative elements. We repeatedly discussed the plan, asking ourselves, "Will profit be distributed arbitrarily?" and, "Will only the officers be treated favorably?" positioning fairness as a fundamental requirement. We led the discussion because we, the Outside Directors, are not eligible for this compensation plan.

**Ina:** I also participated in the discussion as a member of the committee. You were very strongly aware of fairness, weren't

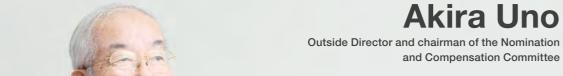
you, Mr. Uno? We tended to place sales and profit at the center of the discussion. I hope that introduction of this plan will enable management to evolve to have a greater awareness of the stock price.

# Expectations of the Sansha Electric Manufacturing Group

Uno: Society as a whole is facing the problem of climate change. Next-generation energy is a subject that the entire world should address to solve this problem. In Japan, the public and private sectors are working together with the goal of achieving carbon neutrality. Our company's products have the potential to play a central role in solving this problem. Whatever the energy source, be it solar, wind or hydrogen, they all need to be transformed into electricity. I feel that this is a great opportunity for us, who are good at supplying power stably using power conversion technologies. I think it is a promising opportunity.

Ina: I completely agree with you. I think that our contribution to next-generation energy is also a very important subject in terms of our role in society. At present, it is not realistic to capture all of the opportunities. Therefore, I hope that the company will establish a position which will make us say, "This is what Sansha Electric Manufacturing is for!" I want them to create a category where Sansha Electric Manufacturing is the best in the world. It could be a niche category. I think that mobility and agility are our company's advantages. I want the company to take on challenges bravely by combining power semiconductors and power supplies and leveraging our unique strengths.

Uno: Our company celebrated the 90th anniversary of its founding in April 2023. There is no easy way for a company to continue operating for nearly 100 years. I hope that the company will continue to achieve growth by solving social issues based on its history and the unique technologies it has accumulated and cultivated.



After serving as a director of The Sumitomo Bank, Limited (currently Sumitomo Mitsui Banking Corporation) and Chairman and Representative Director of SMBC Consulting Co., Ltd., he was involved in the privatization of postal services as an executive officer of Japan Post Co., Ltd. He became a Director of our company in 2014. He is also a Senior Executive Fellow of DMG Mori Co., Ltd., a fellow of Graduate School of Economics, Kyoto University (Doctor of Economics), and an Special Assistant to the President, Kyoto University

# Koichi Ina

Outside Director and member of the Nomination and Compensation Committee

He served as the Senior Managing Director and Chief
Officer of Strategic Production Planning Group at Toyota
Motor Corporation, Chief Officer of Manufacturing Group
at the same company, and President of DAIHATSU MOTOR
CO., LTD. before accepting his position as a Director of
our company in 2019. He is also an Outside Director of
KUBOTA Corporation and the Chairman of the Central Japan



# Basic stance on corporate governance

At the Sansha Electric Manufacturing Group, we practice management based on our corporate philosophy to achieve our purpose: Moving society forward through power electronics and creativity. We will also enhance our corporate value sustainably and contribute to the sustainable development of society by

achieving our vision: Global Power Solution Partner. To achieve this, we have set ensuring compliance and building a highly transparent, efficient foundation of our business as our basic policies on corporate governance.

# Characteristics of the corporate governance system

**Outside Directors** make up at least one third of the Board

The Nomination and **Compensation Committee** is established voluntarily

The maximum number of Directors is eight, and the Directors' term of office is one year

# **Strengthening** corporate governance

■ Corporate Planning Conference established

■ Operating Officer system introduced

2019

■ Officer retirement benefit system abolished A whistleblowing contact established within ■ Directors' term of office shortened to one year

■ Outside Directors introduced

- Assessment of the effectiveness of the Board of Directors begun
- Risk Management Committee (currently Internal Control Committee) established

2018

Standards for assessment by outside ■ Nomination and Compensation accounting auditors formulated Committee established

Outside officers elected to ensure that at

least one third of officers are outside officers

the internal audit department

■ Female Outside Audit & Supervisory Board Member elected

■ Disclosure of skills matrix

■ Whistleblowing contact established at an outside law firm

■ Purpose established

■ Introduced a performance-based stock compensation plan



# Corporate governance system chart



Officers, presidents of subsidiaries based in Japan and heads of relevant departments. It holds at least one meeting each month in principle.

> Review of regulations

> Deliberations regarding projects

involving large payments

It provides overall control and supervision of matters related to risk

management and compliance in the whole Group.

Main matters considered

security

affairs

> Activities to promote compliance

> Measures to enhance information

> Response to the revision of laws

and regulations related to personnel

**General Meeting** of Shareholders Appointment Appointment Appointment and dismissal and dismissal **Board of Directors** Report and With 4 inside and dismissal and Report instruction Instruct & tibuA provide ← Auditing -Supervisory Accounting guidance Board auditino Instruct/provide Directors' execution of their duties. quidance Auditor With 1 inside and 2 outside Collaboration Instruct/provide auidance

# **Nomination and Compensation** Committee

Chairman Akira Uno, Outside Director

It is chaired by an Outside Director, and a majority of its members must be Outside Directors. The content of its deliberations are reported to the Board of Directors. Deliberations on remuneration for officers are joined by an Outside Audit & Supervisory Board Member as an observer.

# Main matters considered

- > Proposal regarding the election of Directors to be submitted to the General Meeting of Shareholders for resolution
- > Proposal on prospective officers to be submitted to the Board of Directors for discussion
- > Basic policy on determining remuneration for officers > Performance-based
- remuneration for individual Directors
- > Approach to succession pla

## > Consideration of the introduction of stock compensation

**Audit & Supervisory Board** Chairman Ichiro Kitano, Full-Time Audit & Supervisory Board Member

14

It holds a regular meeting each month in principle and extraordinary meetings as needed. In accordance with audit plans, Audit & Supervisory Board Members attend Board of Directors' meetings and other important meetings, view significant documents and materials, visit and inspect principal facilities, and receive reports from Directors and other personnel on the execution of duties to audit the legality and appropriateness of the

# Main matters considered

- > Audit policies and plans
- > Reappointment of accounting auditor and remuneration for accounting auditor
- > Proposals for the General Meeting of Shareholders
- > Preparation of audit report

# Number of meetings **Corporate Planning Conference**

12

Chairman Haiimu Yoshimura, Representative Director

It is attended by Inside Directors, Full-Time Audit & Supervisory Board Members, Operating Officers, presidents of subsidiaries based in Japan and the heads of relevant departments. It holds at least one meeting each month in principle. It makes advance deliberations on important business execution matters for which resolutions are set to be made at meetings of the Board of Directors. It also monitors the overall state of progress in the management plan and manages day-to-day actions such as solutions to problems.

# Main matters considered

- > Report on operations of each business and subsidiary
- > Report on the progress of each project

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Report

Appointment and

Collaboration

# **Nomination and Compensation Committee**

We established the Nomination and Compensation Committee in November 2019. Its objectives are to nominate Directors and Audit & Supervisory Board Members and to increase the independence, transparency and objectiveness of the Board of Directors' functions regarding Directors' remuneration and other matters. The committee will enhance our accountability and corporate governance. To ensure the fairness and transparency

## **Composition of the Committee**

- The committee consists of at least three Directors selected by the Board of Directors
- 2 Independent Outside Directors make up half of the committee or more.
- The committee is chaired by a person selected from among the Independent Outside Directors.
- Meetings of the committee are attended by an Outside Audit & Supervisory Board Member as an observer

of the committee, an advisory body focused on decisions regarding the nomination of prospective Directors and Audit & Supervisory Board Members and on Directors' remuneration, the committee deliberates about these matters and reports to the Board of Directors. Since December 2021, an Independent Outside Audit & Supervisory Board Member has been taking part in deliberations on remuneration for officers as an observer.

## Current committee members

Chair	Akira Uno Independent Outside Director				
Members	Koichi Ina Independent Outside Director Hajimu Yoshimura Representative Director & President Masaki Fujiwara Director				
Observer(for deliberations on remuneration for officers only)	<b>Kazuhiro Egawa</b> Independent Outside Audit & Supervisory Board Member				

<sup>\*</sup> Attendance in FY2022: 100% (all members)

# Officer remuneration system

We have formulated a policy regarding the determination of remuneration for officers and the method for calculating it. It is as follows.



intended to promote our continuous growth and medium- and long-term increase of our corporate value. It must encourage officers to perform their duties to their utmost abilities in accordance with our Group vision and to contribute to the improvement of financial results



On the basis of the data collected by outside research bodies, remuneration for officers will consist of base remuneration, which is a fixed amount for individual posts, and performance based remuneration, to ensure that the sound incentives matched with the Directors' duties will serve their intended functions.



Remuneration for Outside Directors and for inside and outside Audit & Supervisory Board Members will consist solely of base remuneration, as they are independent from the execution of business and variable performancebased remuneration is not appropriate for them.

# Process of deliberation and determination of remuneration for officers

Matters regarding a resolution of the General Meeting of Shareholders on remuneration for officers and others

at the ordinary General Meeting of Shareholders for the 74th term adopted by the ordinary that took place on June 27, 2008, establishing an annual upper limit of 300 million yen, excluding the employee wages of any Director who is also an employee. Resolution on the monetary

A resolution on monetary remuneration for Directors was passed compensation for Audit & Supervisory Board Members was

General Meeting of Shareholders for the 59th term that took place on June 28, 1993 to set an annual upper limit of 40 million yen.

Stance on performancebased remuneration

The performance indicator for performance-based remuneration is consolidated operating profit ratio, chosen because it is the most important performance indicator related to the evaluation of performance during the fiscal year under review. We calculated performance-based remuneration by multiplying the standard amount for the specific post by the coefficient appropriate to the consolidated operating profit ratio. The amount of performance-

based remuneration for Directors is discussed by the Nomination and Compensation Committee in accordance with the consolidated operating profit ratio for the fiscal year under review and reported to the Board of Directors. The Board of Directors determines the amount of performance-based remuneration for Directors in accordance with the report from the Nomination and Compensation Committee.

Matters regarding non-

The Company has introduced the performance-based stock compensation plan (hereafter, the "Plan") as non-monetary remuneration. The purpose of the Plan is to increase Directors' motivation to contribute to improved business results and enhanced corporate value in the medium and long term by further clarifying the link between Directors' remuneration and the Company's business performance and stock prices and having Directors share the benefits and risks of stock price fluctuations with shareholders. Points will be granted to each Director according to their position and the degree of achievement of performance targets, etc., based on the stock issuance rules established by the Board of Directors. In principle,

the Company's stock is granted to the Directors when they retire from office. Regarding the upper limit in the amount of money to be provided to the trust as a fund for the acquisition of stock, the initial period of the trust will be approx, four years, and under the Plan and during the period covered, the Company will offer up to 320 million ven, which is the amount of funds for the acquisition of stock necessary for granting the Company's stock to Directors, as compensation for the Directors who are in office during the period covered. Regarding the upper limit for the granting of the Company's stock to Directors, the total number of points allocated to Directors shall not exceed 40,000 points per fiscal

Matters regarding determination of remuneration for individual officers and others

Base remuneration for Directors for the fiscal year under review is the fixed remuneration for specific posts under the Regulations on Remuneration for Directors and has been discussed by the Nomination and Compensation Committee on the basis of officer remuneration data surveyed by an outside research body. The determination of remuneration for individual Directors is delegated to Hajimu Yoshimura as Representative Director & President, on the basis of the resolution of the Board of Directors. The Representative Director & President will determi remuneration in accordance the amounts of remuneration for individual Directors reported after deliberations by the Nomination and Compensation Committee within the limit on total remuneration in accordance with other resolutions that have

been adopted at the General Meeting of Shareholders. The reason this duty has been delegated is that we believe the Representative Director & President can appropriately determine the remuneration for individual Directors in consideration of our overall financial results and other facts. The Nomination and Compensation Committee reviews the appropriateness of the determination of remuneration under the delegated authority prior to decisions coming into affect. Remuneration for Audit & Supervisory Board Members is determined through deliberation among them within the limit for the total remuneration for Audit & Supervisory Board Members as determined by a resolution passed at the General Meeting of Shareholders.

# **Evaluation of the effectiveness** of the Board of Directors

The Company evaluates the effectiveness of the Board of Directors every year to maintain and increase its effectiveness. The Directors and Audit & Supervisory Board Members are subject to evaluation.

Date	From December 26, 2022 to February 27, 2023
Method	Questionnaire 58 questions about the composition, roles, and operations of the Board of Directors, their determination of strategies and orientation, the effectiveness of the internal control system, and the Nomination and Compensation Committee, and other matters
Subjects of the evaluation	6 Directors (including Outside Directors) and 6 Operating Officers
Summary of evaluation results	High marks were generally given to the roles and services played by Board of Directors members, the leadership of the chairperson and the Nomination and Compensation Committee     There still remained some problems with monitoring of management resources, successor nomination and development plans although discussion about them was deepened by the Nomination and Compensation Committee
Measures for increasing effectiveness	As a result of the evaluation of the effectiveness of the Board of Directors, the following tasks were identified  Deepening discussion about the revision of personnel policies, including human resource development, ensuring diversity and the development of successors Sharing an understanding of the changes in the external environment, risks, and other matters and thoroughly

discussing medium- to long-term management policies

officers, such as the creation of regular opportunities to

· Striving to improve the provision of information to outside

# **Evaluation of effectiveness** of the Audit & Supervisory Board

In FY2021, the Company's Audit & Supervisory Board began to conduct a self-evaluation on the effectiveness of its audits for the purpose of assessing initiatives related to its functions and roles and the effectiveness of audits attributed to these initiatives.

From November 29, 2022 to January 31, 2023							
Questionnaire							
Composition and operation of the Audit & Supervisory Board, improvement of the internal control system, response to the Board of Directors, three-way auditing, and other matters							
Evaluation in a total of 18 items on a four-grade scale							
3 Audit & Supervisory Board Members							
The self-evaluation concluded that the auditing activities continued to function effectively in the fiscal year ended March 31, 2023, with improvements made from the previous year in terms of regular interviews with the Representative Director & President and Outside Directors and cooperation with the internal audit department.							
As a result of the analysis of the responses to the questionnaire, we identified the following tasks to be done in the future. We will ensure that the audit plans for the next fiscal year reflect these tasks and strive to improve the quality of audits and reinforce our corporate governance system.  Increasing the number of regular meetings with Outside Directors and the President and enhancing the content of the meetings  Enhancing information about the status of the establishment of the risk management system							

# Internal control

We have established our basic perspective on internal control as the Basic Policy on the Internal Control System and are striving to improve it.

exchange information with them

The Basic Policy on the Internal **Control System** https://www.sansha.co.in/ir/governance.html



Risk management

# Basic stance

As the risks facing businesses are diversifying, the Group identifies the various risks involved in its businesses, constructs a management system for risk prevention and takes actions to minimize the impact of risks. Our basic stance is to respond swiftly and appropriately to respond under the authority of the management team when any risk becomes a reality.

# Risk management system

The Group has established the Internal Control Committee chaired by the Director and Executive General Manager of the Corporate Planning Division. To manage and prevent risk, we are working to develop our emergency response capabilities to address emergency situations when they occur. We have established a system for reporting to the Board of Directors as appropriate. The committee discusses policies and specific measures to address risks that are presumed to be involved in the Group's business activities and to instruct individual departments.

# Major risks and response measures

Risks	Details	Response policy and measures	
Changes in economic environment	Impacts of economic slowdown and decline in capital investment demand on business performance	Sales strategy that does not depend on any specific region or industry	
Business risks Strategic risk	Product defects, delays in product development, suspension of OEM supply and collaboration, rising prices of raw materials, delays in procurement, changes in financial positions of contractors, country risks, competition risks, information security risks and labor shortage	Improvement in technology development, quality and maintenance services     Manufacturing cost cuts, enhancement in productivity and expense reduction     Consideration of alternative procurement for main parts and revision to production contractors	Collection of information on country risks     Information security enhancement and management of contractors     Enhancement of employment system as well as education and training programs
Environmental risks	RoHS Directive and other environmental regulations and spillage of chemical substances Impacts of fluctuations in foreign exchange rates and interest rates and a slide in share price on business performance	Quality management based on quality management standards that comply with laws and ordinances	Chemicals management in strict compliance with standards and procedures
Financial risks	Impacts of fluctuations in foreign exchange rates and interest rates and a slide in share price on business performance	Forward foreign exchange contracts	Reduction of cross-shareholding stocks
Freasury risks	Impacts of impairment in long-term assets, occurrence of retirement benefit obligations, changes in accounting and/or taxation systems on business performance	Regular reviews on possibility of collecting the remaining value of assets	Regular monitoring of pension asset management at the internal committee for pension asset management
Natural risks and pandemics	Damage to manufacturing bases and others caused by natural disasters and business suspension due to a pandemic	Drills for swift first response to large-scale disasters	Formulation of a business continuity plan (BCP)     Encouragement of commuting off rush hours and working from home

# Compliance

## **Basic stance**

We are convinced that the Group's corporate value will be increased by developing a corporate culture that values compliance and by building sound business foundations as a company winning trust from society. We have also established the Sansha Electric Manufacturing Group Behavioral Charter for constantly reviewing our business activities with a view to realizing our corporate philosophy.

We have adopted a system under which the management and supervision of activities to promote compliance are controlled by the Internal Control Committee chaired by the Executive General Manager of the Corporate Planning Division and these matters are reported to the Board of Directors as necessary.

# Compliance awareness survey

We have conducted a compliance awareness survey in the form of a questionnaire since FY2021. Its findings are reported to all employees. The Board of Directors reviews of whether or not the Group has a corporate culture that respects the objectives and the spirit behind the Sansha Electric Manufacturing Group Behavioral Charter. The Internal Control Committee endeavors to identify risks on the basis of the survey results and improves educational and awareness-raising activities regarding compliance.

Based on the results of the questionnaire conducted in FY2021, we continued awareness-raising and educational activities related to compliance. As a result, the percentage of respondents who answered "yes" or "probably yes" to the question, "Do you think that you act with morals and a high ethical standard in business and personal matters?" increased 8 percentage points from FY2021, to 90%.

# Whistleblowing system

The Group has set up compliance helpdesks (whistleblowing contacts) to be contacted by employees regarding inquiries about compliance and for the reporting of any dishonest conduct. In October 2021, an external law firm helpdesk was added and the helpdesk services became available in English and Chinese as well. Further, we have provided all employees of the Group with information about these helpdesks via a card which is distributed to the employees of the Group to carry with them, as well as internal groupware, training sessions, and other means of communication. Through these and other initiatives, we are striving to reinforce the helpdesk system and improve its reliability.

Upon inquiry or notification of any dishonest conduct, the Group will investigate the facts and take corrective and preventive actions.

In accordance with the Whistleblower Protection Act and to thoroughly protect whistleblowers, the whistleblowing system prohibits the dismissal or any other disadvantageous treatment of a person for their whistleblowing.

# Respect for human rights

In the Sansha Electric Manufacturing Group Behavioral Charter, the Group has clarified that, in its global operation of businesses, it will respect the human rights and diversity of not only its employees but also every person with a relationship with the Group. In addition, the Group will consider human rights of all suppliers, including the suppliers in its supply chain, in accordance with its Procurement Policy and Supplier Selection Policy.

In its business activities, the Sansha Electric Manufacturing Group will not tolerate discrimination against anyone or the infringement of anyone's personal dignity on the ground of their race, nationality, birth, religion, belief, gender, sexual orientation, age, disability or other attributes. In contrast, the Group will provide equal opportunities and strive to build a worker-friendly system.

# Number of employees who participated in compliance training in FY2022 (total number)

New employee training	11
Specialized training on laws and regulations, including the Act on the Protection of Personal Information and the Export Trade Control Order	869
Training on specific themes including information security	1,862
Harassment prevention training	868

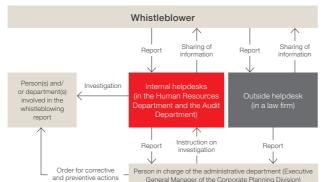
Data covers Sansha Electric Manufacturing Co., Ltd.

# Number of reports and inquiries received via our internal helpdesks

FY2020	FY2021	FY2022
1	5	6

<sup>\*</sup> Including reports and inquiries for which investigations were not conducted and reports and inquiries which were found to be not problematic

# Whistleblowing process flow



# Information security

At the Sansha Electric Manufacturing Group, we understand that we have an important social responsibility to ensure information security. To respond to the trust of society as a whole, we have established rules on information security under our Information Security Policy, developed a system for managing information security, and are pushing forward with relevant measures.

In response to the latest information security threats, we strive to implement information security measures which are

appropriate for the business environment and provide officers and employees with necessary training, such as giving them relevant information, in our efforts to increase their awareness.

In addition, we check for security holes based on the security diagnostics of external specialized institutions and take necessary measures to improve our information security.

## Information Security Policy

At the Sansha Electric Manufacturing Group, we understand that we have an important social responsibility to ensure the appropriate management of information, and we have established our Information Security Policy as described below to respond to trust of society as a whole, including our customers.

# Compliance with laws, regulations and internal rules

We will comply with laws, regulations and other norms related to information security, establish rules on the handling of information assets and manage them appropriately.

# Information security management system

We will appoint a person responsible for the overall management of the entire Group's information security and build an information security management system with a responsible person in place at each organization. Under this management system, we will implement information security measures to maintain and improve information security.

# Implementation of security measures

We will strive to implement information security measures which are appropriate for the changes in the business environment and business category, mainly reflecting the latest threats to information security, examples of attacks and vulnerabilities. If an information security incident should occur, we will respond to it promptly to minimize the damage and take measures to prevent its recurrence.

# Information security education and training

We will provide education and training needed to raise officers' and employees' awareness of information security.

# 5 Continuous improvement

To check the effectiveness of our information security measures, we will conduct self-inspections or self-audits and strive to improve the measures continuously.

# Anti-bribery Initiatives

At the Sansha Electric Manufacturing Group, we believe that we need to strengthen measures against bribery risks, in light of recent situations including the progress in the globalization of business, the tightening of laws and regulations, and the stricter enforcement. We have therefore developed a basic policy and are striving to enhance initiatives to prevent violations.

Sansha Electric Manufacturing Group Basic Policy for Prevention of Bribery and Corruption

https://www.sansha.co.jp/ir/governance.html



# Statuses of internal audits, accounting audits and the internal control department

We have established the Audit Department as an independent organization under the direct control of the President. It conducts internal audits of each department and group company's execution of business from the perspectives of compliance with laws, regulations and internal rules, the effectiveness and efficiency of operations, the reliability of financial reporting and asset protection.

Results of internal audits are reported to the President and

Full-Time Audit & Supervisory Board Member. If there are any points that require improvement, the department monitors the status of improvements in its efforts to ensure the appropriate execution of business.

In addition, Audit & Supervisory Board Members, the Audit Department and the Accounting Auditor hold reporting sessions regularly or as needed to exchange information and cooperate with each other.

Trends in major financial indicators	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
	79th business period	80th business period	81th business period	82th business period	83th business period	84th business period	85th business period	86th business period	87th business period	88th business period	89th business period	90th business perio (Results forecast)
Fiscal year (million yen)												
Net sales	20,547	23,279	22,113	22,191	20,069	23,717	24,369	21,875	19,436	22,675	28,088	30,500
Japan	14,591	16,697	14,943	15,400	13,451	16,026	16,927	15,165	13,462	14,626	18,534	-
Overseas	5,956	6,582	7,169	6,790	6,618	7,691	7,442	6,709	5,973	8,049	9,553	-
Cost of sales	15,469	16,708	15,726	16,421	15,652	17,515	17,930	17,281	15,027	17,227	21,600	-
Gross profit	5,078	6,570	6,387	5,770	4,417	6,202	6,438	4,594	4,408	5,447	6,488	-
Selling, general and administrative expenses	3,452	4,078	4,085	3,893	4,194	4,727	4,605	4,337	3,992	4,131	4,858	-
Operating profit	1,536	2,492	2,301	1,876	222	1,474	1,833	256	416	1,316	1,629	2,000
Ordinary profit	1,616	2,582	2,289	1,801	217	1,480	1,804	243	441	1,313	1,651	2,000
Profit before income taxes	1,231	2,542	2,281	1,710	281	1,471	1,793	290	612	1,320	1,651	-
Profit attributable to owners of parent	910	1,651	1,506	1,172	126	1,065	1,339	Δ 680	497	1,147	1,241	1,400
Capital investment	708	3,040	1,011	407	463	734	720	641	359	513	995	1,900
Depreciation	846	872	1,056	970	955	977	955	1,030	948	920	885	1,150
Research and development expenses	594	664	688	703	511	904	1,305	1,204	1,223	1,250	1,576	1,700
Cash flows from operating activities	1,675	621	2,886	1,401	1,844	3,560	746	36	1,729	940	△ 198	-
Cash flows from investing activities	△ 617	△ 1,858	△ 2,244	△ 321	△ 2,594	△ 499	△ 658	△ 571	△ 355	△ 317	△ 799	-
Cash flows from financing activities	△ 960	334	20	△ 1,484	△ 94	△ 1,135	△ 961	△ 659	△ 249	△ 1,666	△ 189	-
Segment information (million yen)												
Semiconductor business												
Net sales	5,341	6,372	7,039	6,103	5,751	7,016	6,816	5,688	5,709	7,791	8,146	8,500
Segment profit	△ 177	352	859	180	77	657	452	△ 368	172	767	510	300
Power supply business												
Net sales	15,205	16,906	15,073	16,087	14,318	16,700	17,553	16,186	13,727	14,884	19,941	22,000
Segment profit	1,713	2,139	1,442	1,695	145	817	1,381	624	244	548	1,118	1,700
As of the end of fiscal year (million year	n)											
Cash and cash equivalents	5,879	5,212	6,204	5,654	4,966	6,820	5,963	4,659	5,870	5,026	3,959	-
Interest-bearing debt	1,936	1,560	1,832	1,001	1,150	200	100	-	-	-	-	-
Total assets	23,633	27,602	28,007	26,169	25,725	27,817	28,532	24,051	24,846	27,146	29,083	-
Net assets	14,069	16,756	18,665	18,421	18,248	19,314	19,952	18,489	19,336	19,810	21,065	-
Per-share data (yen)												
Earnings per share	72.01	114.75	100.80	79.29	8.71	73.48	93.44	△ 48.22	35.42	83.30	95.33	105.26
Net assets per share	1,112.74	1,121.30	1,249.11	1,271.07	1,259.14	1,332.69	1,410.77	1,316.15	1,376.49	1,541.90	1,583.87	-
Dividends per share	15.0	15.0	17.0	23.0	10.0	20.0	28.0	13.0	15.0	25.0	30.0	40.0
Financial indicators (%)												
Operating profit/net sales	7.5	10.7	10.4	8.5	1.1	6.2	7.5	1.2	2.1	5.8	5.8	6.6
Return On Assets (ROA)	3.8	6.4	5.4	4.3	0.5	4.0	4.8	△ 2.6	2.0	4.4	4.4	-
Equity ratio	59.5	60.7	66.6	70.4	70.9	69.4	69.9	76.9	77.8	73.0	72.4	-
Return On Equity (ROE)	6.7	10.7	8.5	6.3	0.7	5.7	6.8	△ 3.5	2.6	5.9	6.1	6.5
Dividend payout ratio	20.8	13.1	16.9	29.0	114.8	27.2	30.0	-	42.3	30.0	31.5	38.0
Total shareholder return	132.4	143.8	152.1	138.5	128.2	375.3	214.7	133.5	212.9	214.7	254.0	-
Ratio of dividends to net assets	1.3	1.3	1.4	1.8	0.8	1.5	2.0	1.0	1.1	1.7	1.9	-
Shares and share prices	14 050 000	14.050.000	14.050.000	14.050.000	14.050.000	44.050.000	14.050.000	14.050.000	14.050.000	14.050.000	14.050.000	
Total number of issued shares	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	14,950,000	-
Total number of treasury shares	6,046 590	6,541 627	7,099	457,099	457,099	457,099	807,120	902,122	902,122	2,102,122	1,650,022	-
	590	627	648	563	506	1,615	853	469	817	800	950	-
Share price at the end of period (yen) Price earnings ratio (PER)	8.19	5.46	6.43	7.10	58.09	21.98	9.13	_	23.07	9.60	9.97	-

The volume of VOCs which require notification handled (tons)

Consolidated balance sh	eets	(	million yen)					(million ye
Assets	FY20: 88th busine perio	ss 89th b	FY2022 pusiness period	Liabilities and net assets			FY2021 88th business period	FY2022 89th business period
Total current assets	20,81	19	22,510	Current liab	ilities		6,905	7,519
Non-current assets				Non-curren	t liabilities		431	498
Property, plant and equipment	5,25	59	5,499	Total liabiliti	ies		7,336	8,017
Intangible assets	14	13	123	Shareholde			18,795	19,965
Investments and other assets	92	24	949	Accumulate comprehens			1,014	1,100
Total non-current assets	6,32	26	6,572	Total net as	sets		19,810	21,065
Total assets	27,14	16	29,083	Total liabili	ties and net a	assets	27,146	29,083
Consolidated statements	of income	(	million yen)		ated state ehensive i			(million ye
	FY202		FY2022	or compr	CHCH3IVC I	ncome	FY2021	FY2022
	88th busine perio	ss 89th b	period				88th business period	89th business period
Net sales	22,67	75	28,088	Profit			1,147	1,241
				Other comp	rehensive inco	ome	557	85
Cost of sales	17,22	27	21,600	Comprehens	sive income		1,704	1,327
					e income attribut			
Gross profit	5,44	17	6,488	Comprehensive income attributable to owners of parent			1,704	1,327
Selling, general and administrative expenses	4,13	31	4,858	Consolidated statements of				(million y
Operating profit	1,31	16	1,629				FY2021 88th business period	FY2022 89th business period
Ordinary profit	1,31	13	1,651	Net cash provided by (used in) operating activities  Net cash provided by (used in)		940	△ 198	
Profit before income taxes	1,32	20	1,651	investing ac	tivities ovided by (use	,	△ 317 △ 1,666	△ 799 △ 189
Total income taxes	17	73	409		tivities change rate ch sh equivalents		198	120
Profit	1,14	17	1,241	cash equiva			△ 844	△ 1,066
				beginning of	ash equivalent f period	s at	5,870	5,026
Profit attributable to owners of parent	1,14	17	1,241	Cash and ca end of perio	ash equivalent d	s at	5,026	3,959
Non-financial data =								
Environmental data	Sansha Electric Manufacturing Co., Ltd.	Scope  Domestic group companies	Overseas group companies	85th business	FY20219 86th business period	FY2020 87th business period	FY2021 88th business period	FY2022 89th business period
Energy consumption								
Power consumption (MWh)	•	•	•	17,915	16,768	16,689	17,628	18,319
Utility gas consumption (m³)	•	•	•	207,332	184,658	178,412	216,795	205,361
Heavy oil consumption (liters)	(Okayama Plant)			83,558	80,051	75,028	71,210	9,676
Water consumption (thousand m³)	•	•	•	236	218	178	191	190
CO <sub>2</sub> emissions (tons CO <sub>2</sub> )	•	•	•	12,364	10,836	10,056	9,916	10,063
Industrial waste (tons)	•	•		794	626	610	704	668
Recycling rate (%)	•	•		98.2	98.5	99.0	98.7	98.7
The volume of PRTR substances	•	•						
handled (tons)	•			53.3	42.1	43.7	54.0	49.8

44.0

56.6

53.7

43.3

70.0

	Scope						
Sansha Electric Manufacturing Co., Ltd.	Domestic group companies	Overseas group companies	FY20218 85th business period	FY20219 86th business period	FY2020 87th business period	FY2021 88th business period	FY2022 89th busine period
•	•	•	1,414	1,402	1,381	1,405	1,46
•	•	•	929	925	926	933	98
•	•	•	485	477	455	472	47
•	•	•	34.3	34.0	32.9	33.6	32.
•			44.6	45.1	45.8	46.2	46.
•	•		17.8	18.2	18.8	18.7	18.
•	•		18.6	19.1	19.6	19.6	19.
•	•		14.2	14.6	15.2	15.1	15
•	•		3.4	2.8	2.4	2.6	3
•			5,452,559	5,633,151	4,990,469	5,353,204	5,625,23
•	•		66.9	66.0	69.6	72.5	73
•	•		330	338	330	334	27
•	•		13	19	22	22	2
)	•		3.9	5.6	6.7	6.6	10
			108	120	118	116	1
			3	3	4	4	
6)			2.8	2.5	3.4	3.4	3
•							24
6)	•		1.8	2.7	2.7	2.7	2
	•		11	18	18	17	
			10	13	14	14	
			13	7	3		:
(s)							
•	•		8	4	0	5	
•	•		14.8	10.1	9.4	13.3	13
•	•		71.7	74.8	72.3	74.2	81
re •	•		12	5	19	13	
•	•		0	1	4	1	
	•		88.9	91.7	100.0	100.0	100
			0.0	100.0	100.0	100.0	100
							100
							2
							_
•							
•	•						80
•	•		0	0	0	0	
•	•		0	0	0	0	
			40 45 4	17 000	16 000	26 125	15 0
•	•		18,454	17,023	16,923	26,135	13,00
•	•		18,454 7	17,023	16,923	20,133	
•	•				ŕ		15,86
	Manufacturing Co., Ltd.	Sansha Electric Manufacturing Co., Ltd.  Domestic group companies  One of the companies	Sansha Electric Manufacturing Co., Ltd.  Domestic group companies  Overseas group companies	Sansha Electric Manufacturing Co., Ltd.  Domestic group companies  1,414 929 485 34.3 44.6 17.8 18.6 14.2 3.4 5,452,559 66.9  330 330 330 330 330 330 330 330 330 3	Sansha Electric   Manufacturing   Group   Con, Ltd.   Companies   Companies	Sansha Electric Manufacturing Co., Ltd.         Domestic Cos., Ltd.         Overseas group companies         FY20218 Sibh business period         FY2020 Sibh business period         FY2021 Sibh business period	Product   Prod

<sup>\*</sup> Calculated based on the provisions of the Act on the Promotion of Female Participation and Career Advancement in the Workplace

# Stock and shareholder data (as of March 31, 2023)

Stock exchange listing	Tokyo Stock Exchange Standard Market (securities code 6882)		
Administrator of shareholders' register	Sumitomo Mitsui Trust Bank, Ltd		
Number of shares issued	14,950,000		
Number of shareholders	7,638		

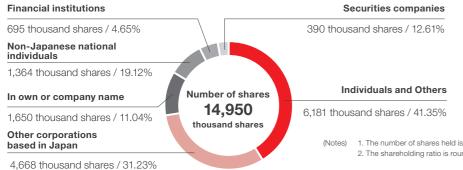
# Major shareholders (ten largest shareholders)

Name	Number of shares held (unit: thousands)	Shareholding ratio (%)
Mitsubishi Heavy Industries, Ltd.	1,335	10.04
Panasonic Holdings Corporation	1,213	9.12
Miyashiro Limited Liability Company	758	5.70
Nitto Kogyo Corporation	667	5.02
Employee Shareholding Association of Sansha Electric Manufacturing	378	2.85
Kunio Shikata	330	2.48
The Senshu Ikeda Bank, Ltd.	314	2.36
Sumitomo Mitsui Banking Corporation	280	2.11
Hideo Shikata	228	1.72
Yukiya Morita	220	1.65

(Notes) 1. The number of shares held is rounded

- down to the nearest thousand.
  2. Sansha Electric Manufacturing Co., Ltd. owns 1,650,022 treasury shares, but excluded itself from the list of major shareholders.
- 3. The shareholding ratio is calculated disregarding treasury shares and rounding

# Distribution by type of shareholders



(Notes) 1. The number of shares held is rounded down to the nearest thousand.

2. The shareholding ratio is rounded to two decimal places.

# Monthly trends in share price and trading volume



# Company outline (as of March 31, 2023)

Company name	Sansha Electric Manufacturing Co., Ltd.
Date of foundation	March 8, 1933
Data of incorporation	April 28, 1948
Headquarters location	3-1-56, Nishiawaji, Higashiyodogawa-ku, Osaka 533-0031 Japan
Capital	2.7 billion yen
Number of employees (consolidated)	1,465 (912 in Japan, 553 overseas)
Branches, sales offices and other offices	Tokyo, Aichi, Fukuoka, Ishikawa, Finland, South Korea and Taiwan
Plants and laboratories	Osaka, Shiga and Okayama
Consolidated subsidiaries	Japan SANSHA SOLUTION SERVICE CO., LTD. (Osaka) SUWA SANSHA ELECTRIC CO., LTD. (Nagano Prefecture) OSAKA DENSO INDUSTRY CO., LTD. (Osaka)  Overseas SANREX CORPORATION (USA) SANREX ASIA PACIFIC PTE. LTD. (Singapore) SANREX LIMITED (Hong Kong) SANSHA ELECTRIC MFG. (SHANGHAI) CO., LTD. (China) SANSHA ELECTRIC MFG. (GUANGDONG) CO., LTD. (China) DONGGUAN EASTERN ELECTRONICS CO., LTD. (China)

Scope of reporting	Sansha Electric Manufacturing Co., Ltd. and its nine consolidated subsidiaries.  However, the applicable scope of reporting is specified on a case-by-case basis if it differs from the above.
Period covered	Fiscal year 2022 (from April 1, 2022 to March 31, 2023)
Contact for inquiries	Public Relations Department Phone: +81-6-6321-0321 (switchboard number) sanrex-ir@sansha.co.jp
Disclaimer	This report contains plans, strategies and forward looking statements such as financial outlooks. They are based on the information available at the time of publication and on certain assumptions that are deemed reasonable. Please note that results may differ from these statements due to a variety of factors.

