Evaluation analysis for achieving the vision

# Sustainability strategy Solving social issues through business activities

**Developing strengths** 

invisible assets)

Picturing the desired fu

# **Basic policy**

While international society is currently facing climate change and many other social and environmental 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.



## 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.

## 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

Prevention of global warming

We will observe environmental laws and regulations and meet equivalent requirements

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



#### Reduction of the environmental impact of products

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

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

## 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.







Contribution to a recycling-oriented society



substances We will work to reduce emissions of substances that adversely impact the

environment and to prevent pollution.

Reduction of hazardous

We will strive to minimize waste and efficiently use resources to aid the realization of a sustainable 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 management system

## ISO14001 certifications we have acquired

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



We are planning to make capital investments to accelerate the reduction of  $\text{CO}_2$  emissions.



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

Further, we plan to reduce emissions by promoting initiatives including process improvements in the manufacturing department, the company-wide improvement of efficiency, and addition and revision of reduction items based on the latest environmental technologies.

In addition, to set a reduction target for Scope 3  $CO_2$  emissions, we are working to understand the current situation.

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)



#### Evaluation analysis for achieving the vision

## **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.

#### 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.

### 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 treatment facilities at the Okayama Plant



## Waste emissions and recycling ratio

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



### Water consumption

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





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