

CSR Report 2020

Period Covered by This CSR Report

April 1, 2019 through March 31, 2020 (fiscal 2019).
Some activities conducted in fiscal 2020 are also covered.

Boundary of This CSR Report

Sumitomo Electric Industries, Ltd. and its consolidated subsidiaries (383 companies)

In this CSR Report, “Sumitomo Electric,” “the Company” or “our company” refers to Sumitomo Electric Industries, Ltd., “Group companies” or “affiliates” refers to the consolidated subsidiaries of Sumitomo Electric, and “the Sumitomo Electric Group” or “the Group” refers to Sumitomo Electric and its Group companies.

- When quantitative information is disclosed, Sumitomo Riko Company Limited, Nissin Electric Co., Ltd., SUMITOMO DENSETSU CO., LTD. and TECHNO ASSOCIE Co., Ltd., which are listed on stock exchanges in Japan, and their consolidated companies are excluded. In some cases, Sumitomo Electric alone or only the Company and limited consolidated subsidiaries or some of the equity-method companies are included. The items referenced within such a specifically limited boundaries are indicated in the text or footnotes in the table or graph. The CSR management of the listed companies in the Group is introduced in P19 and P20.
- For details of the boundary of data collection for environmental indicators, see Explanation of the Boundary in P60.

ESG Data

- ESG data are presented in P76 to 78.

Guidelines Referenced

■ GRI Standards

This report references GRI standards 2016.
The GRI Content Index is published on the following website:

<https://global-sei.com/csr/download/>

- Environmental Reporting Guidelines 2018 issued by the Ministry of the Environment of Japan.

Efforts to Improve the Reliability of the Disclosed Information

To ensure the accuracy and completeness of the performance indicators, we have engaged an independent third party to provide assurance on them, and the indicators subject to the assurance are marked accordingly. In addition, comments on our initiatives and disclosure from an external expert in this field are published to enhance the credibility.

Introduction of the Disclosed Media Other Than This CSR Report

The acquisition of ISO 14001 certification and a table showing correlation of employee support programs with relevant laws are published on the following website:

<https://global-sei.com/csr/download/>

Date of Publication

November 2020

(Last CSR Report: published in November 2019; and next CSR Report: scheduled for release in November 2021)

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Basic Value Standards

The Sumitomo Spirit

The Sumitomo Spirit grew out of the guiding principles set down in his later years by the founding father of the House of Sumitomo, Masatomo Sumitomo (1585 - 1652), in Monjuin Shiigaki (the Aphorisms of Monjuin, which describes how a merchant should conduct his business). The Sumitomo Spirit has been passed down and elaborated through the history of Sumitomo, which mainly operated copper business. The essence of the Spirit was distilled in the "Business Principles" codified in 1891. Also integrated into the Sumitomo Spirit are other beliefs and principles behind business decisions, and remarks made by Sumitomo managers, which have been handed down through generations. The pioneering ideas of the Sumitomo Spirit, which also reflect today's concepts of compliance and CSR, have been steadfastly inherited as a commonly held asset of Sumitomo Group companies.

Business Principles

Article 1

Sumitomo shall achieve prosperity based on solid foundation by placing prime importance on integrity and sound management in the conduct of its business.

Article 2

Sumitomo's business interest must always be in harmony with public interest; Sumitomo shall adapt to good times and bad times but will not pursue immoral business.

Traditional Beliefs and Principles

● Attaching Importance to Technology

Sumitomo's original copper business centered on the nanban-buki (foreign-style) refining technique, which at the time comprised the leading edge of smelting technology. The business policy of valuing technology and tackling the development of new technology has been a driving force in the evolution of Sumitomo business from the very beginning.

● Respect for Human Resources

Sumitomo's history is accentuated with events that demonstrate the great value that is attached to opinions of those working in the field. Over the years, Sumitomo has established a corporate culture in which frank discussions are cherished and human resources are given the utmost importance. Sumitomo has always considered that people make the enterprise and attached importance to human resources. This tradition has coexisted with the commitment among Sumitomo personnel to character cultivation.

● Long-Range Planning

This principle is derived from Sumitomo's original experience in copper mine management which requires long-term, continuous consideration. Business development with a future-looking, long-term view, complemented by a wider perspective to ensure national and social interests, is one of the factors that have made Sumitomo distinctive.

● Mutual Prosperity, Respect for the Public Good

This phrase represents the principle that Sumitomo's business must benefit not only Sumitomo but also the nation and society in general, and everyone in Sumitomo is required to focus not only on making money but always conduct business in harmony with public interests. Also demonstrated by its more than century-long efforts to solve environmental problems in the Besshi Copper Mine, this spirit has always remained unchanged at Sumitomo.

Monjuin Shiigaki (the Aphorisms of Monjuin)

Masatomo Sumitomo was born in 1585 of the late Sengoku Period, in Maruoka, Echizen (now Maruoka-cho, Sakai-shi, Fukui Prefecture) as the second son of a samurai warrior family, but entered priesthood in Kyoto at the age of 12. His intelligence led him to be given the name Monjuin, after Monju Buddhist saint who embodies enlightened wisdom. He later left the priesthood and started his own business to trade books and medicines, which was the origin of the House of Sumitomo. Even after he left the priesthood, many people continued to ask for his teachings and respect his faithful instructions. The fact that the founding father was a widely respected Buddhist priest is the unique feature of the Sumitomo Group. A letter written by Masatomo Sumitomo (Monjuin) in response to a family member's request for guidance on conducting business was Monjuin Shiigaki.

Banji-nissei (do your sincere best in not only business but also every aspect of your life)

Consisting of five articles, Monjuin Shiigaki contains ideas reflecting the unstable social conditions of Kyoto in the 17th century, when it was written. The preamble admonishes us to pay attention to any matters including business and work wholeheartedly on everything. This precept "Banji-nissei" has been passed down continuously, by way of hoping that each one of us in Sumitomo does not focus only on making money but improves the personality and develops the character. This lofty document urges us to persist in sincere and careful effort and to cultivate good character.

The Sumitomo Electric Group positions this "Banji-nissei" as the keyword representing the Sumitomo Spirit.

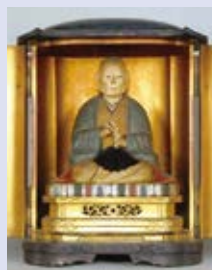
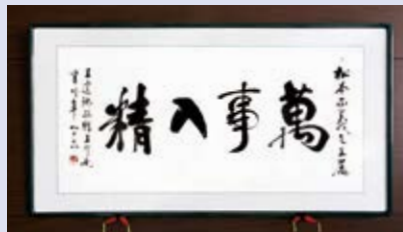


Figure of Masatomo Sumitomo (Monjuin)※



Signboard of the medicine shop operated by Masatomo※



Calligraphy work "Banji-nissei," which was given by Chairman Wang Jianyi of Futong Group Co., Ltd., China to commemorate the launch of joint ventures

※ Collection of Sumitomo Historical Archives

The Sumitomo Electric Group Corporate Principles

On the occasion of Sumitomo Electric's centennial celebration in 1997, the Sumitomo Electric Group defined the Sumitomo Electric Group Corporate Principles as a new management philosophy arising from the Sumitomo Spirit. The Corporate Principles underscore our basic policy of commitment to our important stakeholders--our clients, shareholders, society, the environment and our employees--and rededicate the Group to the importance of compliance and trust.

Each company of the Sumitomo Electric Group shall

- Offer the very best goods and services to satisfy customer needs.
- Build technical expertise, realize changes and strive for consistent growth.
- Contribute to creating a better society and environment, with a firm awareness of our social responsibility.
- Maintain high corporate ethics and strive to become a company worthy of society's trust.
- Nurture a lively corporate culture that enables employee self-improvement.

The Sumitomo Electric Group Charter of Corporate Behavior

To realize a "Glorious Excellent Company," which is the ideal state of the Sumitomo Electric Group, we must uphold the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles as a basis of all business activities and conduct business with our strong will and sincerity in an honest manner. In September 2005, the Sumitomo Electric Group Charter of Corporate Behavior was created to express the essence of our Group-wide code of conduct in a more straightforward and easy-to-understand manner, so as to help each and every administrator and employee in the Group make judgments and act to realize the principles presented in the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles.

1. Provision of Useful and Safe Products and Services

- We will aim to provide useful and safe products and services that will satisfy customers in all aspects including quality and cost.

2. Development of New and Original Businesses and Products

- We will aim to develop new, original and profitable businesses and products by using our unsurpassed creativity in meeting customer demands.

3. Growth and Development of the Sumitomo Electric Group through Global Business Activities

- We will strive for consistent growth of the Sumitomo Electric Group, by consistently conducting our businesses with a global perspective and taking full advantage of the Group's dynamic business operations.

4. Contribution to Preservation of the Global Environment

- We will contribute to the building of a sustainable society, taking voluntary and active initiatives to preserve the global environment.

5. Observance of Laws and Regulations

- We will observe national and international laws and regulations and always act fairly and openly.

6. Fair and Proper Business Activities

- We will promote fair, transparent and free competition and sound trade.

7. Conduct as a Member of Society

- We will contribute to creating a better society, with a firm awareness of our social responsibility as a "good corporate citizen."
- We will maintain a strong stand against any force that threatens public order and safety.

8. Harmony with the International Community

- As a corporate member of the international community, we will respect the culture and customs of every region of the world and contribute to the development of those regions.

9. Safe, Sound Workplace and Employees' Growth and Development

- We respect the rights of all individuals and will endeavor to make our workplaces safe, sound and energetic.
- We will strive to respect personality and individuality of the employees and support their professional development and career to enable self-realization.

10. Disclosure of Relevant Information and Promotion of Communication with Society

- We will aim to disclose appropriate corporate information to our various stakeholders, including shareholders.
- We will also promote good communication with society through public information and hearings.



With the concerted efforts of the entire group, we will work to make society “environmentally friendly,” “safe and secure,” and “comfortable with much potential for growth.”

Osamu Inoue President & COO Sumitomo Electric Industries, Ltd.

» Preface

I sincerely express my gratitude for your continued support and understanding of Sumitomo Electric Group’s business activities. I also thank you for reading this CSR Report 2020.

During the period covered by this report, while the global economy was expanding moderately on the whole until the third quarter with steady economic recovery in the United States and other factors, economic activities contracted sharply after January 2020 due to the worldwide COVID-19 pandemic. Also in the Japanese economy, although personal consumption recovered due to improvement in the employment situation and other factors in the first half, consumer spending began to decline as a result of the consumption tax hike in October last year and the situation became even worse with the impact of COVID-19 in the fourth quarter.

The business environment surrounding the Sumitomo Electric Group was very severe with the impacts of decreases in car production and smartphone sales, lower prices of optical fibers and cables, stronger yen and copper price decline, along with the sharp slowdown of economic activities due to COVID-19 in the fourth quarter.

Under these circumstances, our consolidated results for fiscal 2019 recorded net sales of 3,107.0 billion yen, a year-on-year decrease of 2.2%. Operating income also dropped by 23.5%

year-on-year to 127.2 billion yen in spite of our best efforts to reduce costs on a global scale.

» Priority initiatives for the realization of VISION 2022

Our group is currently committed to taking “SEQCDD*” one step further under the concept of “Contributing to a better society by leveraging our expertise in connectivity and transmission technologies through concerted efforts of the entire group” to achieve the mid-term management plan VISION 2022*. Specifically, we set the three priority initiatives of “enhancement of manufacturing capabilities,” “increasing global presence” and “creation and enhancement of leading technology” with an aim to become a “Glorious Excellent Company,” which is an ideal future state for our group. As to the enhancement of manufacturing capabilities, we firmly believe that the foundation of manufacturing is to ensure safety and aim to meet the target of accomplishing “zero accidents in people, goods and equipment” to become a company with the highest level of safety in the world. While also focusing on the promotion of safety measures for facilities, we are committed to the thorough separation of vehicles from people to eliminate forklift accidents through the review of factory layouts to avoid encounters of people with forklifts. We have

also introduced a system to have plants inspected by plant managers from different divisions to identify issues from different perspectives and encourage improvement. As a result, our group, including Sumitomo Wiring Systems, Ltd., achieved the target of zero serious accidents although the target set separately for each fiscal year on the total number of accidents, including those resulting in remaining disabilities and the accident score, was not met. We will further enhance our efforts to achieve the targets.

Aiming to create strong factories, which are also a basis for our manufacturing capabilities, we work for the day-to-day improvement of more than 200 items every month. We also promote AI-based improvement through close coordination between the plants and Plant & Production Systems Engineering Division with the IoT R&D Center playing a pivotal role, which has produced material results in the plants in our group. For increasing global presence, we are raising the supply of our products to car manufacturers in the US and Europe. We have completed the investment for the expansion of shrinkable tube production in the US to strengthen our system to supply shrinkable tubes to overseas car manufacturers. Moreover, we acquired two group companies of Sinterwerke, a powdered metal component manufacturer in Europe, in May 2019 to increase our market share for overseas customers. In the meantime, the construction of a traffic control system for Phnom Penh Capital City, the Kingdom of Cambodia was completed in August 2019, while in May 2020 we received an order for a high-voltage DC power transmission cable system in Germany that connects the coast of the North Sea, where offshore wind power sources are developed, with the southern region, which demands a large amount of electricity. We thus work to reinforce our foundation on a global scale in various business fields. To accelerate the creation and enhancement of leading technology, we made organizational reforms including the integration of the research and development organizations for the CASE* field, which is expected to grow substantially in the future, into Automotive Business Unit beyond the conventional border between the unit and Infocommunications Business Unit. We also set up CAS-EV Development Promotion Office in Sumitomo Electric to conduct even more sophisticated research on high-voltage DC power transmission cables and other items.

» Social contribution through our business

As in the previous reports, this report also introduces examples of our products that support society and explains how they contribute to a sustainable global environment and human society through our sustainable business operations and CSR activities, our company and the global environment on which we are based, as well as the sustainability of human society. As a nature of our business, the items we provide are not finished products for end users but their components. For example, power cables are an essential product to deliver electricity, which is a driving force of economic development. We help improve the environment by supplying high-voltage DC cables to deliver renewable energy, which has attracted attention as a measure to address climate change in recent years, to areas where a large amount of electricity is demanded. For water treatment products, we provide POREFLON™ membrane, which purifies industrial wastewater and renders it harmless to help prevent water pollution. The demand for POREFLON™ membrane has increased in China and is expected to further grow because it removes fine particles, bacteria, etc. contained

in dirty water to purify the water into potable clean water. The supply of rectangular magnet wires that help reduce the size of motors used in vehicles and increase their output will eventually result in lower CO₂ emissions. The combination of CPV* and redox flow batteries offers a means to supply renewable energy to society. While our products contribute to society as parts and their contribution is low-key, we consider that we are expanding the fields where we make a steady and reliable contribution to society.

» Learning from the lessons of the COVID-19 pandemic

To address the spread of COVID-19, our group has launched the New Coronavirus Infection Task Force chaired by me to establish a system to grasp the level of the impact of COVID-19 on our business bases located all over the world in a timely manner and take prompt measures to respond to it. Based on it, our manufacturing sites aim to further enhance the conventional measures such as improvement activities and shop-floor training to make plants more advanced and stronger. For clerical sections, we founded the Work Style Subcommittee, in which the relevant divisions serve as the secretariat, to assess the effects and problems of teleworking, which has been expanded with the impact of the COVID-19 pandemic. The subcommittee also facilitates internal discussions to ensure that our efforts will lead to business and work style reforms for productivity increases even after the end of the pandemic. While we already formulated business continuity plans (BCP), we have learned from the COVID-19 pandemic that our understanding of the situation of the secondary and tertiary suppliers in our supply chain might have been insufficient. Based on this lesson, we are now promoting the enhancement of the system to purchase items from more than one supplier and other measures. Since natural disasters have occurred more often and on a larger scale in recent years, we have to further enhance our risk management in the supply chain and make sure to conduct periodical reviews. Conventionally, it was a major prerequisite that the business keeps growing and expanding and we tended to focus on what we should do for the growth and expansion as well as the development of new products. Under the current situation where orders we receive are decreasing, I assume that we should consider how we can continue our business in a reliable manner as a foundation for our sustainable contribution to society including various stakeholders.

» The Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles, which relates to SDGs

Positioning the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles as its key management value, our group has been committed to the creation and expansion of businesses as well as CSR activities. I consider that these activities are also related to the SDGs* adopted by the UN in 2015. For the creation of "environmentally friendly society," "safe and secure society" and "comfortable society with growth potential," which are targets for the mid-term management plan VISION 2022, we will continuously make concerted efforts to provide values that lead to the solution of various social problems.

*CASE

A term for the trends in the automotive industry; an acronym for **C**onnecte**d**, **A**utonomous, **S**hared and **E**lectric

*CPV

Concentrator Photovoltaic System

*SDGs (Sustainable Development Goals)

An acronym for Sustainable Development Goals, which are composed of 17 goals and 169 targets presented by the UN along with long-term development guidelines for the period from 2015 to 2030

Mid-term Management Plan VISION 2022

Basic Concepts

Contributing to a better society by leveraging our expertise in connectivity and transmission technologies through concerted efforts of the entire group.

Overall Concept Diagram

A "Glorious Excellent Company" is Sumitomo Electric Group's ideal future state. Positioning the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles as our basic management value, we will help create a better society through business activities. In our growth strategy, we aim to diversify our technologies and products and create innovations that meet new social demand in the fields of Automotive, Infocommunications, Electronics, Environment & Energy and Industrial Materials based on the Manufacturing Base, Human Resources and Organizational Base and Financial Base we have developed, and will be committed to enhancement of manufacturing capabilities, increasing global presence and creation and enhancement of leading technology.



Our Priorities

Enhancement of Manufacturing Capabilities

Taking "SEQCDD" one step further

- Aim for "the world's top safety company"
- Create "strong factories" through continuous improvement (kaizen)
- Exert our strength by sharing and propagating technologies and best practices among Group companies worldwide

Increasing Global Presence

- Work to increase market share with global customers
- Create new business models that anticipate market changes
- Enhance the efficacy of our marketing efforts

Creation and Enhancement of Leading Technology

- Continue to enhance core technologies from materials to processes
- Innovation that anticipates change in the automotive and energy fields and exploits commercialization opportunities with agility
- Challenge ourselves to create innovative technology that encourages social reform

2019

5

- ◆ POWER DEPO™ III, a lithium-ion energy storage system for domestic use, was registered as a model to receive a subsidy of FY2019 ZEH* support project

8

- ◆ Completed the construction of a traffic control system for Phnom Penh Capital City, the Kingdom of Cambodia



Traffic control center

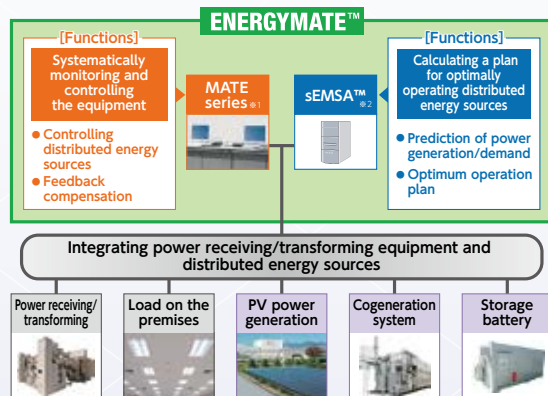


Completion ceremony hosted by Phnom Penh Capital City

11

- ◆ An energy management system equipped with Sumitomo Electric's "sEMSA™" was for LNG satellite supply* and other purposes

Composition of ENERGYMATE™, an energy management system equipped with sEMSA™



※ ENERGYMATE™ is a trademark or registered trademark of Nissin Electric Co., Ltd.

※1 Monitoring and control system products

※2 A system to calculate a plan to operate distributed energy sources based on the prediction of photovoltaic power generation and demand and other data to ensure that the total energy cost is minimized

2020

1

- ◆ Delivered POREFLON™ water treatment membrane modules (with a total processing capacity of 100,000 m³/day) to three large sewage treatment plants in China



Sumitomo Electric's water treatment membrane modules delivered to Wastewater Treatment Plant in shipan town, Jianyang City, Sichuan Province

2

- ◆ Started the full-scale construction of offshore wind farms at Akita Port and Noshiro Port in Akita Prefecture, which are the first large-scale commercial offshore wind farms in Japan, jointly with Kajima Corporation



Submarine cable being shipped (sample image)

3

- ◆ Selected as a 2020 Health and Productivity Stock



- ◆ Completed the construction of power transmission and transformation equipment for Japan's largest onshore wind farm "Wind Farm Tsugaru"

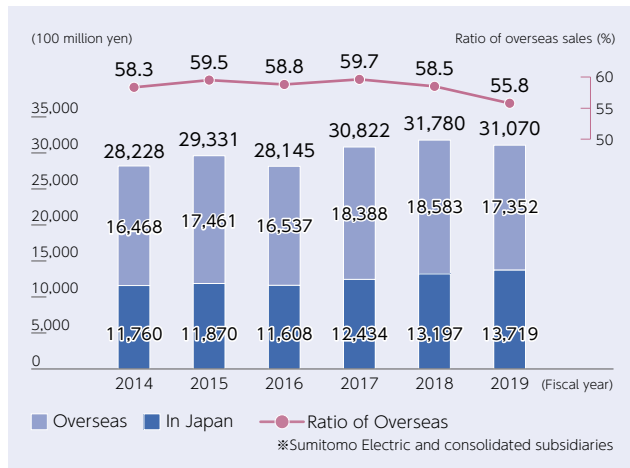


Photo courtesy of Green Power Investment Corporation

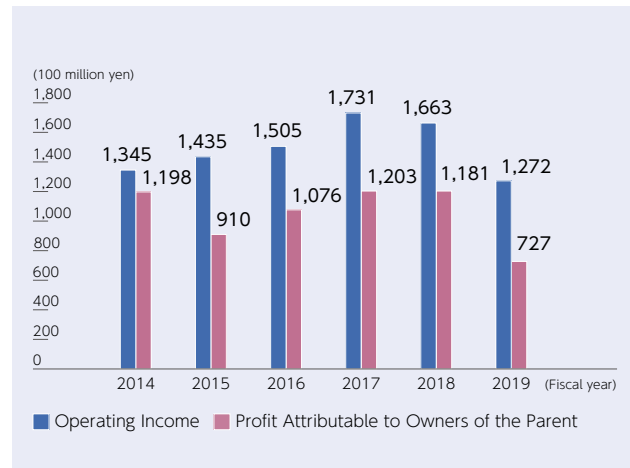
Financial and Non-Financial Highlights

Financial Overview

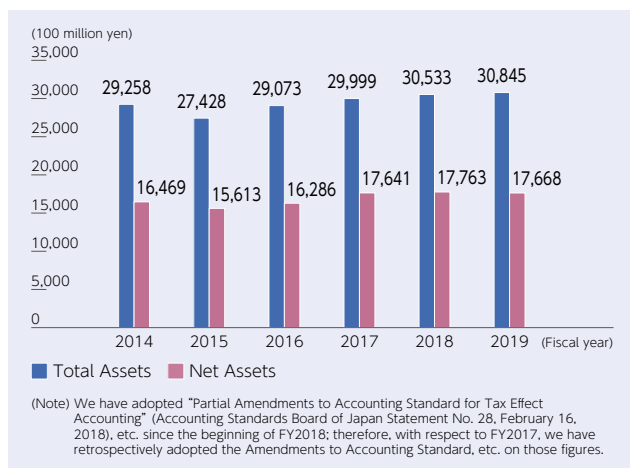
Sales in Japan and overseas and ratio of overseas sales by year



Operating Income and Profit Attributable to Owners of the Parent (Consolidated)



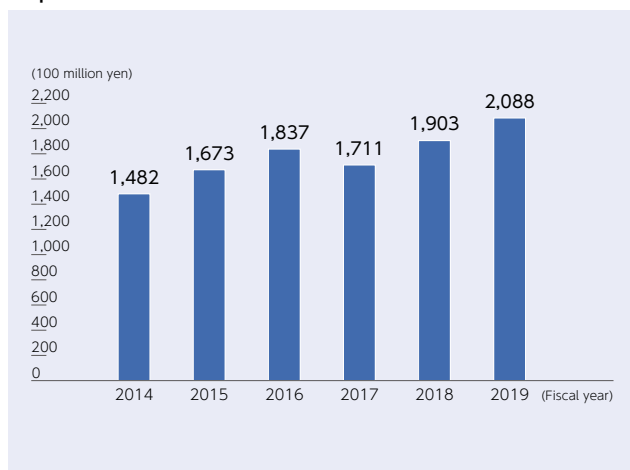
Total Assets and Net Assets (Consolidated)



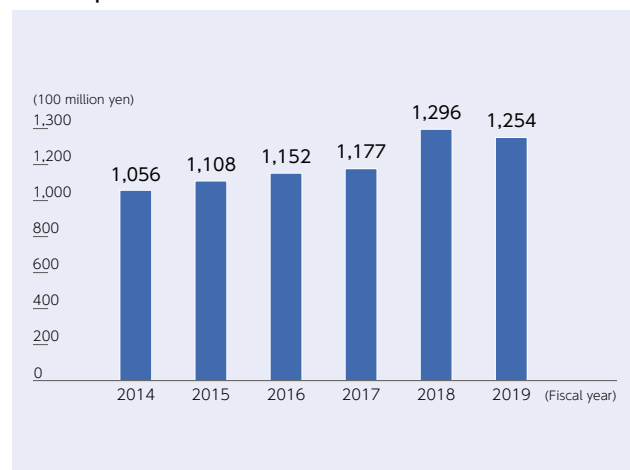
Return on Equity (ROE) and Return on Invested Capital (ROIC)*



Capital investment

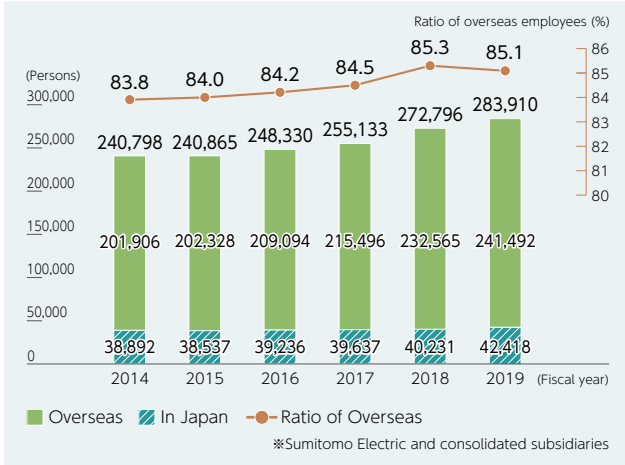


R&D expenditures



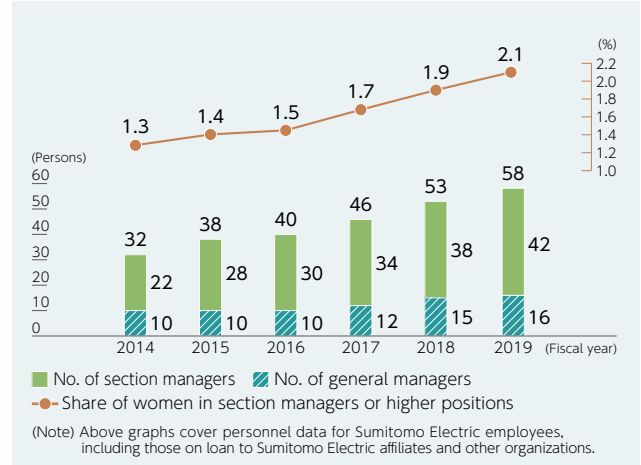
Non-financial Overview

Number of employees in Japan and overseas and ratio of overseas employees by year

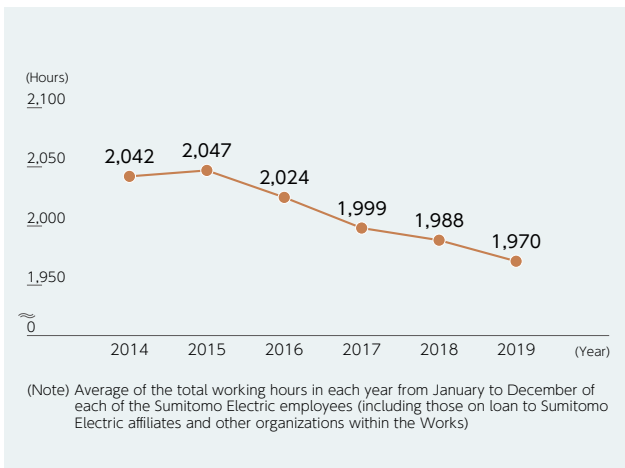


Number and share of women in section managers or higher positions

as of January 16 of each fiscal year

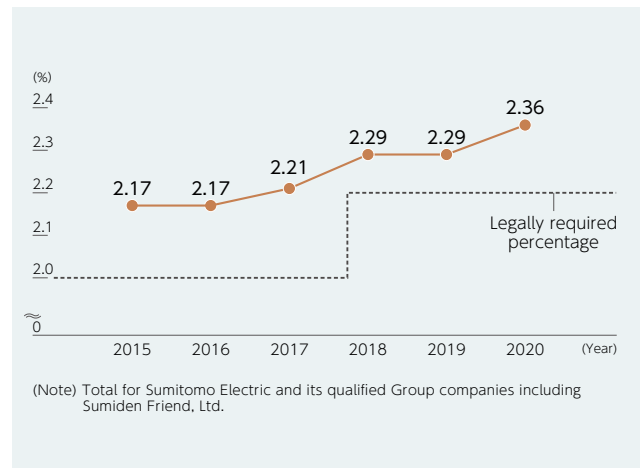


Average Total Working Hours by Year

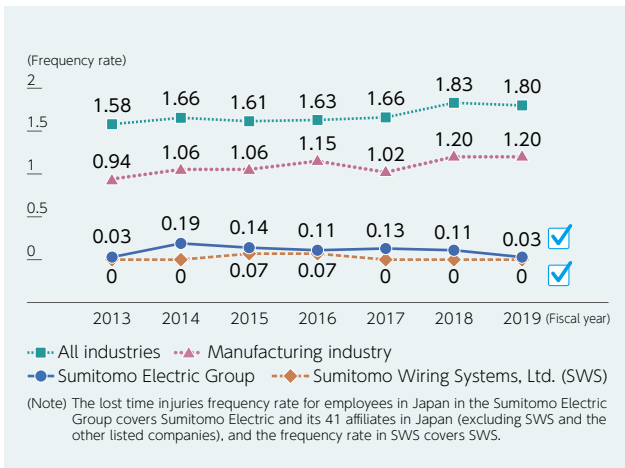


Employment Rate of the Physically or Mentally Disabled by Year

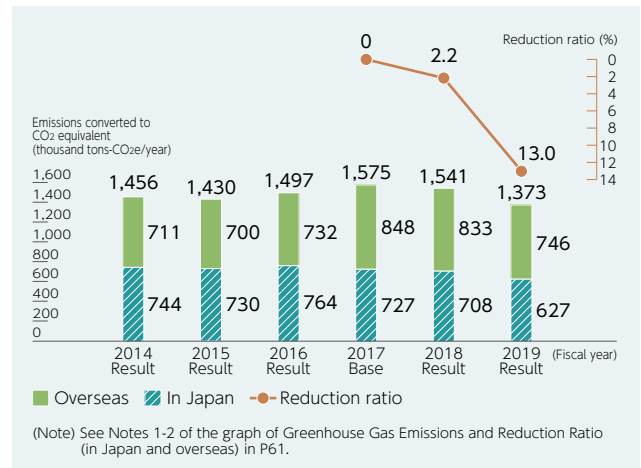
Employment rate as of June 15 of each year



Lost Time Injuries Frequency Rate* for Employees in Japan by Year



Greenhouse Gas Emissions and Reduction Ratio (in Japan and overseas)



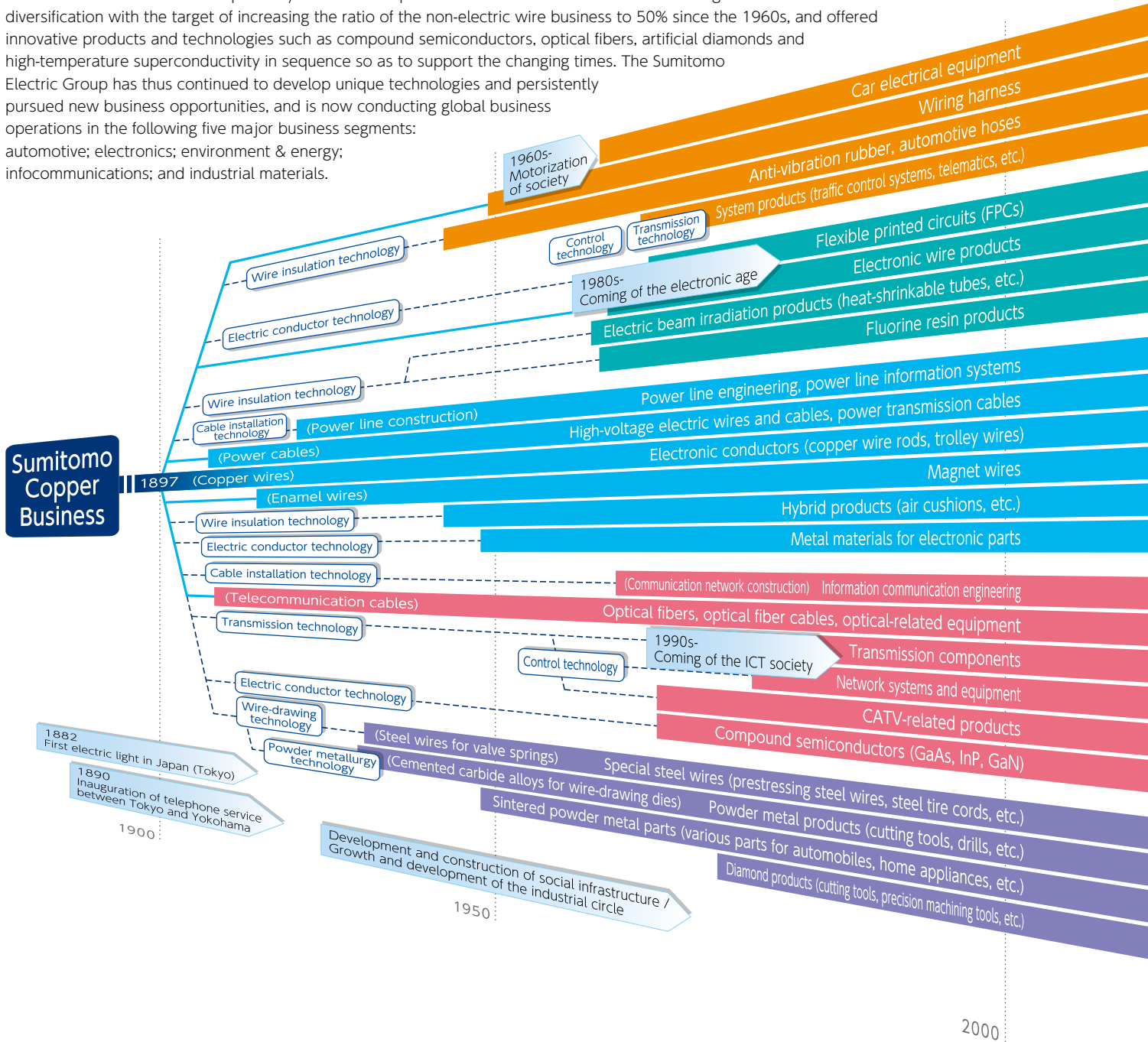
Glossary

* Frequency rate

Number of deaths and injuries caused by industrial accidents per million working hours. Used to express accident frequency. The formula is: Number of deaths and injuries caused by industrial accidents / Total working hours x 1,000,000.

Our History and Business

Starting with copper wire production, the electric wire and cable business of Sumitomo Electric has expanded in the respective segments, including the manufacturing of power cables and communication cables and then magnet wires, automotive wiring harnesses and electronic wires for information equipment, in line with the development of society. In the meantime, we also began to diversify our business in early years based on the technology to produce electric wires and cables. The production of cemented carbide tools and special steel wires launched in 1931 and 1932 respectively was a firm step into the areas outside the electric wire segment. We have accelerated the diversification with the target of increasing the ratio of the non-electric wire business to 50% since the 1960s, and offered innovative products and technologies such as compound semiconductors, optical fibers, artificial diamonds and high-temperature superconductivity in sequence so as to support the changing times. The Sumitomo Electric Group has thus continued to develop unique technologies and persistently pursued new business opportunities, and is now conducting global business operations in the following five major business segments: automotive; electronics; environment & energy; infocommunications; and industrial materials.



History

- | | |
|---|---|
| <p>1897 Sumitomo Copper Rolling Works was founded.</p> <p>1900 Started production of coated wires.</p> <p>1908 Started production of power cables.</p> <p>1909 Started trial production of telecommunication cables.</p> <p>1911 Established Sumitomo Electric Wire & Cable Works (the foundation of the Company).
Manufactured and supplied the first Japan-made underground high-voltage (11,000 V) cables.</p> <p>1916 Opened a new factory (now the Osaka Works)
Started production of enamel wires.</p> <p>1920 Incorporated Sumitomo Electric Wire & Cable Works as a limited company (the establishment of the Company).</p> <p>1931 Started production of cemented carbide ("IGETALLOY™") tools.</p> <p>1932 Started production of special steel wires.</p> <p>1939 Company name changed to the current name, Sumitomo Electric Industries, Ltd.</p> <p>1941 Opened the Itami Works.</p> | <p>1943 Started production of anti-vibration rubber and fuel tanks.</p> <p>1946 Opened a branch office in Tokyo (now the Tokyo Head Office).</p> <p>1948 Started marketing sintered powder metal products.</p> <p>1949 Entered into the business of construction of overhead transmission lines.</p> <p>1957 Delivered the first Japan-made television broadcasting antennas.</p> <p>1961 Opened the Yokohama Works.
Delivered the wiring harnesses for four-wheel vehicles for the first time in its history.</p> <p>1962 Started production of IRRAX™ Tube electron beam irradiation tubes.
The Head Office was moved from Osaka's Konohana Ward to the present address in Chuo Ward.</p> <p>1963 Started production of disc brakes.</p> <p>1964 Started production of electron beam irradiation wires.</p> <p>1968 Entered into the business of traffic control systems.</p> <p>1969 Established its first overseas production subsidiary.
Started development of flexible printed circuits (FPCs).</p> <p>1970 Started production of compound semiconductors.</p> |
|---|---|

Automotive

Contributing to accelerating improvement delivered by CASE and to the evolution of mobility

Our main automotive products are wiring harnesses, which are laid throughout an automobile to transmit power and information. Wiring harnesses require advanced technologies to reliably transmit electricity and information to electrically-driven components and control equipment in the automobile despite intense vibration and heat. In the Sumitomo Electric Group, Sumitomo Wiring Systems, Ltd. and AutoNetworks Technologies, Ltd. have established such a prominent presence in the market that one out of four automobiles in the world uses Sumitomo Electric's wiring harnesses. Steady advances in the use of aluminum wiring harnesses have been helping reduce automobile weight. Our connecting technologies are essential for realizing connected cars and autonomous driving, which must handle a huge amount of information, as well as for achieving widespread use of hybrid and electric vehicles. We intend to become a mega-supplier with the wiring harness business at the core for an excellent harmony between automobiles, people and society in the next generation.

Electronics

Supporting further evolution of mobile devices, automobiles and aviation equipment

The diverse range of raw, wiring and other materials supplied by our group have supported the evolution of various electronic equipment at the core. Flexible printed circuits (FPCs) are one of the main products of the Group. Their versatility in forming high-density circuits in a small area makes them a wiring material adaptable to all kinds of increasingly complex equipment. We have electron beam irradiation technology used to produce electric wire products and heat-shrinkable tube, and fluorine resin processing technology applied to printer toner fixing rollers. In addition to these proprietary material development, design and processing technologies, we are experts in high-speed data transmission technology, constantly creating products to meet demand for sophisticated functionality. We aim to become a global supplier of high-performance cables, components and materials by refining these technologies and strengthening our supply chain to be successful in global competition.

Environment & Energy

Building new energy systems for the widespread use of renewable energy and other purposes

We melt, solidify and roll copper. Sumitomo Electric's electric wire and cable products evolved from its copper wire production since its foundation. With a solid foundation and proven track record of achievements among Japan's top-tier businesses in the category of low to ultra-high voltage electric wire and cable products, we support energy infrastructure throughout Japan. Currently, the technical expertise of our group is required for the construction of new energy systems in line with trends such as international grid interconnection projects, primarily in Europe, infrastructure development in emerging countries, increasing use of renewable energy and widespread use of electric vehicles. We aim to build a stronger global presence drawing on our strengths such as diverse high-value product families and associated services, project-planning expertise, overall capabilities involving affiliate companies in the heavy electrical machinery and engineering fields and end-to-end system development from raw material to finished product.

Infocommunications

Endeavoring to realize high-speed, high-capacity telecommunications meeting the challenge of the increasing data traffic volume

Communication infrastructure is essential for society. Optical fiber cables and other components and equipment that support communications, supplied by the Sumitomo Electric Group, play an active role in communication infrastructure. We began manufacturing optical fiber products in the 1970s. Among them, those for over 10,000 km ultra-long distance submarine systems are required to exhibit high quality and high reliability. We have built a presence in the industry with our high technical expertise as represented by the Z fiber, which is an optical fiber developed for ultra-long distance submarine system applications. The Z fiber broke the world record for low-loss optical fiber. Our strengths also extend to Ultra-High-Fiber-Count Optical Cable manufacturing technology and software development for visual- and optical-access devices. Increasing volumes of information are currently exchanged throughout the world. With our technologies playing a key role in important connections, we will lead the age of high-speed, high-capacity telecommunications by working on developing innovative new products that are one step ahead of and exceed various customer expectations, such as compound semiconductors for optical/wireless applications developed via collaborative vertical integration from raw materials to finished devices.

Industrial Materials

Contributing to the growth of industries and social infrastructure by developing and supplying high-functionality materials

Materials produced by the Sumitomo Electric Group have evolved on the basis of its thin copper wire-making technology. Our cutting and grinding tools made of materials such as diamond, cubic boron nitride and cemented carbide alloys support all fields of manufacturing throughout the world. Additionally, special steel wires that reinforce concrete structures and tires and sintered powder metal parts used primarily in automobiles are essential for the growth of society and industries. In response to the growing demand for lightweight automotive materials and the growth in the medical and aviation industries, we will offer tangible forms of innovative solutions for customer and social challenges, drawing on our world-class materials development capabilities and production technologies.

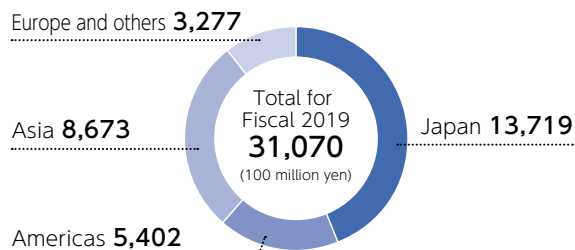
1971	Opened the Kanto Works.	2003	Sumiden Hitachi Cable Ltd. (wires and cables for buildings and industrial equipment) started operation.
1974	Started production of optical fiber cables.		Sumitomo Electric Hardmetal Corp. (powder metal and diamond products) started operation.
1975	Contracted to construct a power transmission line in Iran.	2004	A.L.M.T. Corp. was made a wholly-owned subsidiary.
1976	Received an order for a large telecommunications network project in Nigeria.	2006	The HTS cable used in a power transmission grid in the U.S. started supplying electricity.
1978	Delivered and put into operation the world's first bi-directional fiber optic CATV system "Hi-OVIS."	2007	Sumitomo Wiring Systems, Ltd. was made a wholly-owned subsidiary.
1981	Delivered the fiber optic LAN system for the first time in its history.		Nissin Electric Co., Ltd. was made a consolidated subsidiary.
1982	Succeeded in producing the world's largest synthetic monocrySTALLINE diamonds (1.2 carats).	2008	Opened the Technical Training Center.
1996	Developed a technology for producing long-length oxide high-temperature superconducting wires.		Sumiden Friend, Ltd. (Special subsidiary) started operation.
1998	Developed and started marketing ecology wires and cables.	2009	Sumitomo Electric Device Innovations, Inc. was organized.
1999	Sumitomo Electric Fine Polymer, Inc. (fine polymer products) started operation.	2010	Opened the WinD Lab, a new laboratory building.
2001	J-Power Systems Corporation (high-voltage power cables) started operation.		SEI Optifrontier Co., Ltd. (now Sumitomo Electric Optifrontier Co., Ltd.) was organized.
2002	Sumitomo Electric Networks, Inc. (network equipment) started operation.	2014	J-Power Systems Corporation was made a wholly-owned subsidiary.
	Sumitomo (SEI) Steel Wire, Corp. (special metal wires) started operation.	2015	Started a demonstration test of the world's-largest-class redox flow battery system.
	Sumitomo Electric Wintec, Inc. (magnet wires) started operation.	2019	TECHNO ASSOCIE Co., Ltd. was made a consolidated subsidiary.

Global Business Expansion

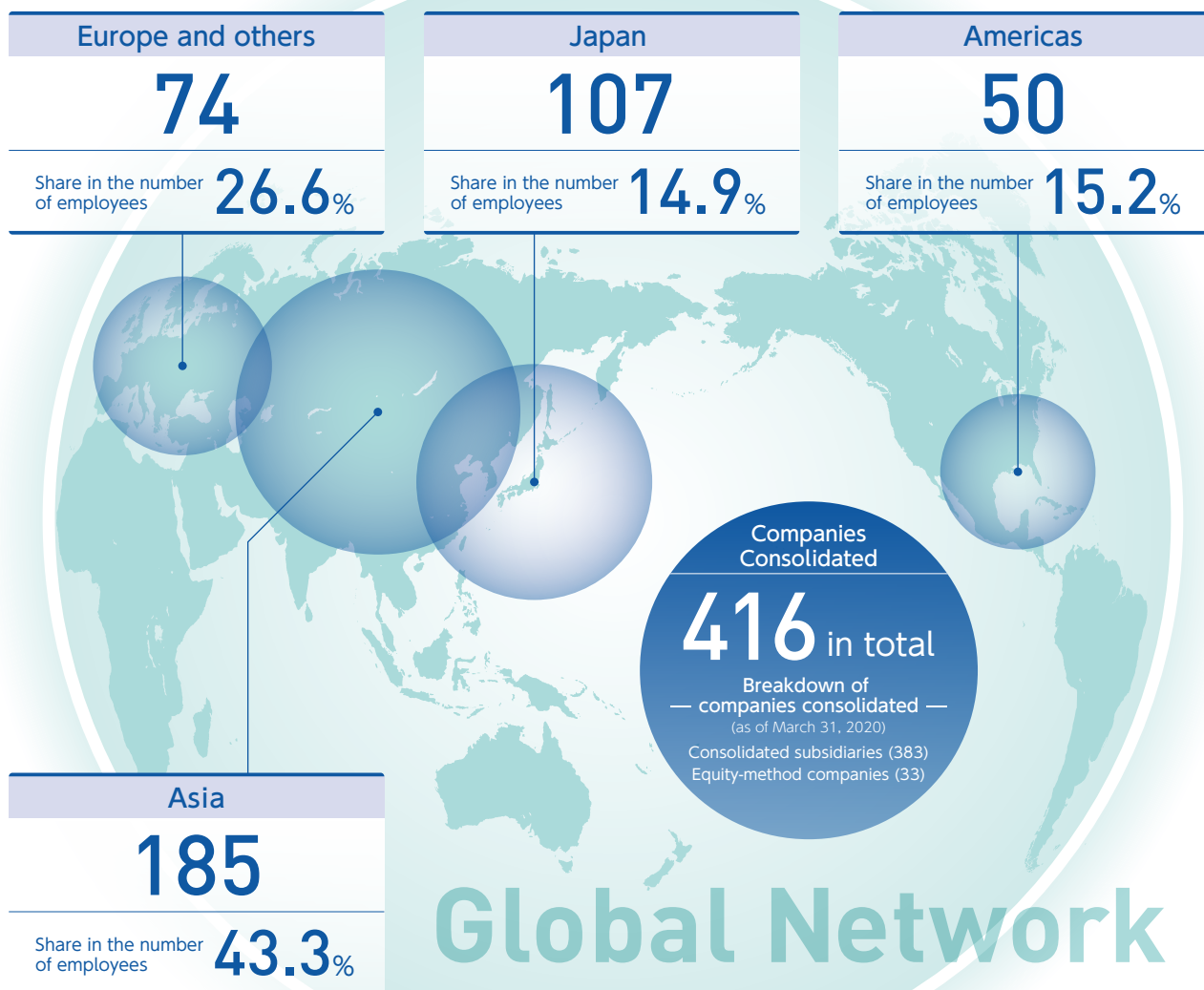
The Sumitomo Electric Group is developing business activities on a global scale, with 416 consolidated companies and over 280,000 employees around the world. While providing superior products and services, we respect the cultures and customs of the countries and regions in which we operate. As a corporate entity we conduct business in harmony with society, so as to contribute to the sustainable development of the economy and society.

Company Name	Sumitomo Electric Industries, Ltd.
Established	April 1897
Incorporated	December 1920
President	Osamu Inoue
Capital Stock	99,737 million yen (as of March 31, 2020)
Head Office	4-5-33, Kitahama, Chuo-ku, Osaka, JAPAN

Net Sales by Region (Consolidated)



Number of consolidated companies by country or area / Share in the number of employees



History of the business development on a global scale

Sumitomo Electric started to export electric wires, which underlie the industry, during the era of its forerunner, Sumitomo Electric Wire & Cable Works, which was founded in 1911. In the postwar period, we expanded our business by exporting full turnkey projects, which covered exports of electric wire products and all services from design to construction. This leads to the establishment of foundations for the social and economic development of developing countries and regions all over the world.

With respect to products in the business segments as well, we have promoted localization of the business by setting up a number of production bases in the trend of customer demand for overseas operation and so on. Through these activities, we have provided technical guidance and have established an integrated system of production and sales outside Japan.

single company. A total of 300 Japanese staff and 2,000 locals worked together on the project for 11 and a half years until its completion in 1988.

In the two power transmission line construction projects for which we received orders in Iran in 1975 and 1977, we faced not only harsh geographical and weather conditions in the construction area but also unstable political circumstances such as revolution and war. Still, we managed to connect major industrial bases of the country and eventually complete the projects in 1987.



Full turnkey projects

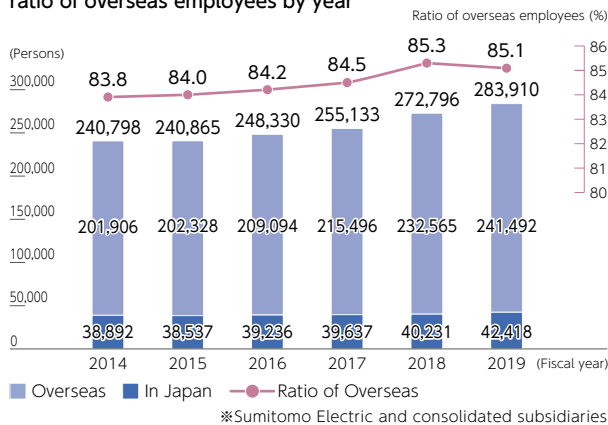
Since our first project in Venezuela in 1963, we have undertaken construction works in Asia, Middle East, Africa and South America to lay power transmission lines, which serve as an "artery" that conveys electricity throughout society, and to build communication networks, which serve as a "nerve system" that conveys information.

In particular, the order we received to construct an urban telephone network in Nigeria in 1974 was at that time an unprecedentedly large communication network construction project, even by worldwide standards, to be placed with a

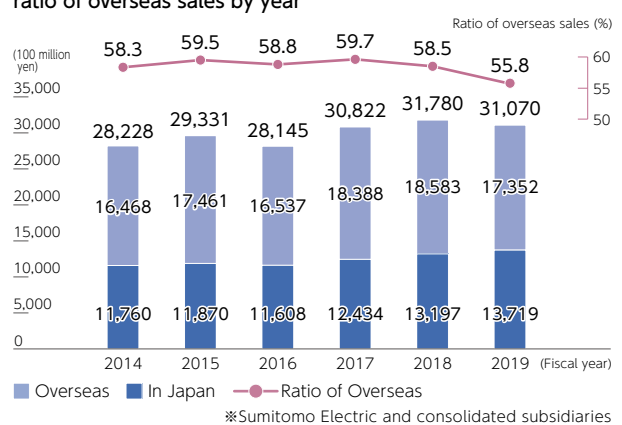
Global development by business segment

Beginning with the foundation of our first overseas manufacturing base in Thailand in 1969, we have promoted the establishment of overseas bases in consideration of market characteristics and needs for each business segment. In the parts of the world in which we have established our bases, we are committed to job creation and human resource development while aiming to stabilize the local operation. We now have a total of 309 overseas consolidated companies with more than 240,000 employees.

Number of employees in Japan and overseas and ratio of overseas employees by year



Sales in Japan and overseas and ratio of overseas sales by year



Number of Group Employees in the World by Year

	2010	2011	2012	2013	2014	2015	2016	2017			2018			2019		
								Male	Female	Total	Male	Female	Total	Male	Female	Total
Americas	15,164	19,712	24,273	29,470	34,828	33,500	37,959	20,381	18,542	38,923	20,523	20,008	40,531	21,099	22,154	43,253
Europe, Africa and others	41,230	47,735	47,644	54,245	56,477	56,273	56,797	24,097	36,440	60,537	24,733	41,014	65,747	30,018	45,397	75,415
Southeast Asia	37,538	43,000	49,868	56,408	58,278	61,848	65,844	25,009	46,520	71,529	28,466	50,779	79,245	29,238	50,385	79,623
China	51,887	46,788	47,390	47,646	52,323	50,707	48,494	19,716	24,791	44,507	22,853	24,189	47,042	21,360	21,841	43,201
Japan	36,954	37,499	37,148	37,715	38,892	38,537	39,236	32,201	7,436	39,637	32,488	7,743	40,231	33,798	8,620	42,418
Total	182,773	194,734	206,323	225,484	240,798	240,865	248,330	121,404	133,729	255,133	129,063	143,733	272,796	135,513	148,397	283,910
Ratio of overseas employees	79.8%	80.7%	82.0%	83.3%	83.8%	84.0%	84.2%	84.5%			85.3%			85.1%		

※Sumitomo Electric and consolidated subsidiaries

We will enhance CSR management for our growth and development from a longer-term perspective

Miwa Kunii

Executive Officer and General Manager of Public Relations Department



The Sumitomo Spirit, which presents basic value standards for the Sumitomo Electric Group, states the importance of “Mutual Prosperity, Respect for the Public Good,” requiring us to focus not only on making money but always conduct business in harmony with public interests. This principle thus shares the same goal with CSR activities, which aim to win the trust of stakeholders and make social contributions. While human rights issues and environmental problems are now attracting more global attention, our group has to become a corporate group with higher sensitivity. I believe that a company with high sensitivity listens to various social needs actively so that it can identify social challenges and reflect the solutions on its business and management foundations. In the long term, such an attitude will enable the company to grow and develop while winning the public trust. For example, while the teleworking system launched as part

of our initiatives to encourage women to play more active roles was expanded to cover all employees in 2018, this allowed us to change the workplace environment smoothly in response to the COVID-19 pandemic this year. This is a case where a measure initiated from the perspective of diversity helped us handle company-wide risks. We will continue to promote the establishment of workplaces where diverse human resources, including employees who use the short-time work system and non-Japanese employees, can work comfortably and feel rewarded, along with management to ensure that they can exercise their abilities. Also, while growing through the mutual enhancement of sensitivity, our group aims to become a stronger organization that can make a wide range of social contributions including those made through our business.

CSR Basic Policy

The Sumitomo Spirit, which gives top priority to social credibility and corporate ethics, is deeply instilled into the Sumitomo Electric Group. With the Sumitomo Spirit, as well as the Sumitomo Electric Group Corporate Principles, serving as the basic value standards that guide us, we will enhance our efforts for CSR management, communication with stakeholders and human rights while setting governance, risk management and compliance as the foundations. Then, through business activities based on them, we will create social values and contribute to a better society and environment.

In accordance with the establishment of VISION 2022 in fiscal 2018, we revised part of the CSR core categories. With “quality,” “supply chain,” “human resources,” “environmental preservation” and “social contribution” as the five core categories, we will promote business activities. We will fulfill our corporate social responsibility and establish good relationships with stakeholders with the aim of becoming a Glorious Excellent Company, i.e., realizing the ideal state of the Sumitomo Electric Group.



CSR Core Categories, Priority Themes and Main Targets

In line with the announcement of the mid-term management plan VISION 2022, we revised the CSR core categories and priority themes as presented below and also set main targets including new key performance indicators (KPIs) for fiscal 2022 in a way to link them to VISION 2022, instead of the previous approach focusing on targets set for each fiscal year. We aim to further increase our net sales by 20% from the

current level to 3.6 trillion yen under VISION 2022. It is actually challenging to set and declare quantitative CSR targets amidst accelerating market changes. Still, with the recognition that CSR activities are one of the two key components of our management strategy and are essential to becoming a Glorious Excellent Company, the ideal state of our group, we will enhance our efforts to meet the targets.

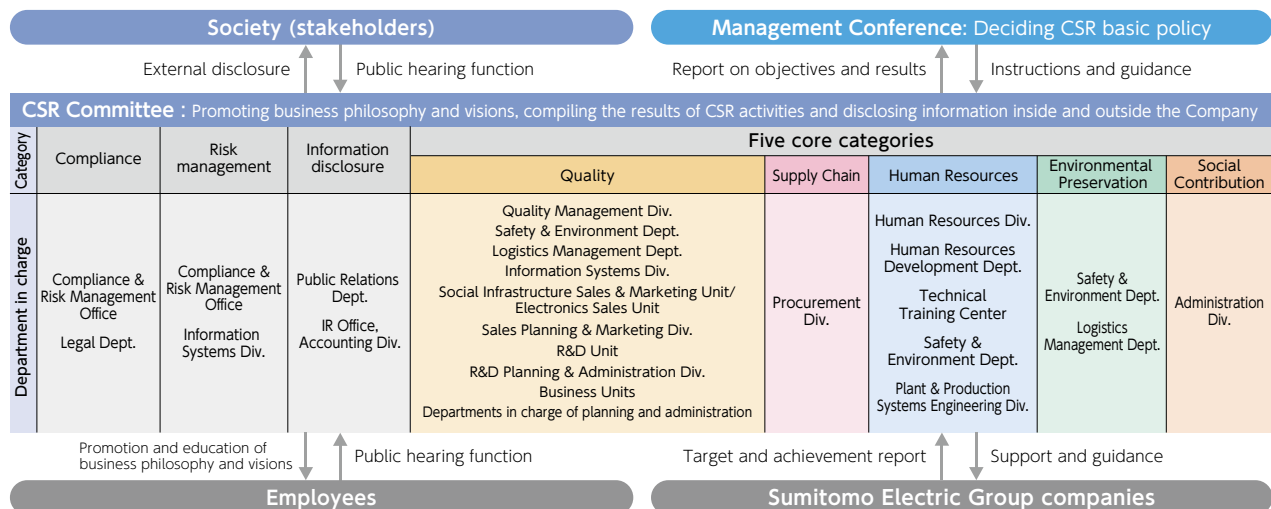
Core categories	Priority themes	Main targets (including KPIs for fiscal 2022)	Main related SDGs
Quality	Product quality & product safety	Reduce the index for the number of complaints by 30% from the FY2017 level	
Supply chain	Promotion of CSR procurement	Promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement	
Human resources	Promotion of diversity and occupational safety	Promotion of appointment and development of SEG Global Executives	
		Serious accidents + Accidents resulting in remaining disabilities: 0 Accidents resulting in lost work time + No lost work time accidents + Accidents causing minor injury: 23 or less Accident score*: 80 or less	
Environmental preservation	Prevention of global warming	Reduce CO2 emissions by 5.0% from the FY2017 level	
Social contribution	CSV* activities and social contribution activities	Maintain and expand the projects that help solve social problems	
		Enhance the activities of the SEI Group CSR Foundation	

Sumitomo Electric Group CSR Promotion System

In July 2004, Sumitomo Electric established the CSR Committee, which is chaired by the officer in charge of personnel and general administration and comprised by the managers of the departments in charge of CSR-related areas. The Committee set up CSR Promotion Office as its secretariat in July 2010 and conducts its activities as a cross-sectional organization to promote CSR initiatives in the Sumitomo Electric Group under the system shown in the figure below.

The roles of the CSR Committee include:

1. Holding semiannual meetings to review the CSR activities from a group-wide perspective and give support and guidance on the future development.
2. Promoting internal and external information disclosure and public hearings on CSR.
3. Promoting CSR education programs throughout the Sumitomo Electric Group, etc.



Glossary

* Accident score

An accident score is calculated by weighting the accidents that have occurred by type. Class 1: Accidents that can result in a serious accident (forklifts, hoist cranes, rotating parts, moving parts, etc.); Class 2: Accidents caused by an edged tool, jig or device; and Class 3: Falling accidents, collides while walking, backache, etc.

* CSV: Creating Shared Value

CSV is a concept advocated by Michael E. Porter, an American academic specialized in corporate competitive strategies, as a framework for the business strategy that aims to balance the economic activities of companies to gain profits with the creation of social value.

Targets and Actual Results in Fiscal 2019 / Targets for Fiscal 2020

In the Sumitomo Electric Group, the departments in charge of the CSR core categories respectively set various annual targets for the achievement of the main targets mentioned in P16, prepare specific action plans based on the annual targets and work to achieve them autonomously. The table below shows the main targets and results in fiscal 2019 and targets for fiscal 2020 on the main initiatives in core categories. To meet the targets, we will continue to promote the initiatives based on the PDCA (plan-do-check-act) cycle.

Core Category	Priority Theme	Targets for FY2019	Results in FY2019	Evaluation	Page
Quality	Product Quality & Product Safety	Reduce the index for the number of complaints by 16% from the previous fiscal year	Decreased by 15% from the previous fiscal year	△	39
		Continue to promote Own Process Quality Assurance Activities (tenth year) ① Company-wide development of important measures to prevent major complaints (continued) ② Company-wide development of the "3 points control of quality" (continued) ③ Expansion of Own Process Quality Assurance Activities on practical themes (continued) ④ Continuance of activities for company-wide dissemination (through the issuance of booklets, holding of exchange meetings and other initiatives)	① Compiled key points for preventing the recurrence of major complaints in "TAZAN-NO-ISHI" (quality information-sharing) and published it. Introduced a prevention check sheet across the company to conduct voluntary inspections ② Involved 9 divisions in the model activities of "3 points control of quality". Reduced the number of complaints by 23% on average in the model divisions ③ Number of activities on practical themes: 319 (an increase of 64 year-on-year) ④ Added 6 examples to the booklets to introduce good practices and held an exchange meeting in August	○	38 39
Supply chain	Promotion of CSR Procurement	Continue the promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement • Continuous implementation of the survey based on the CSR procurement self-assessment sheet • Expansion of the boundary to include Sumitomo Riko Company Limited, Nissin Electric Co., Ltd.	Conducted the CSR survey covering the suppliers that represent 90% of the value of our domestic procurement • Implemented the survey based on the CSR procurement self-assessment sheet (380 companies in FY2019, 1,761 companies in total from FY2017 to FY2019) • Started the CSR procurement survey in Sumitomo Riko Company Limited and Nissin Electric Co., Ltd.	○	43 44
		• Continue to implement the training program that supports compliance • Extend the application of the procurement guidelines to overseas affiliates	• Interviewed 37 suppliers in Japan through a meeting or on-site inspection and asked them to make improvement • Compliance training: Provided to 766 persons in Production Group and Corporate Staff Group and 25 persons in R&D Group • Inspected 26 overseas affiliates and gave instructions	○	41 44
Human resources	Promotion of Diversity and Occupational Safety	• Appointment of new SEG Global Executives • Promotion of measures to develop SEG Global Executives	• Newly appointed 3 SEG Global Executives • As of April 1, 2020, the total number of SEG Global Executives is 43 • Promoted measures to develop SEG Global Executives	○	45 46
		Implement priority items • Continuance of promotion of the talent management cycle • Further activation of Regional Executive Conferences and Area Committee activities • Continuance of the executive training program	• Continued to conduct Business Unit HR Meetings • Continued to hold the Regional Executive Conference and enhanced Area Committee activities • Continued to hold the executive training program (with the participation of 3 SEG Global Executives)	○	45 46
		Reduce serious accidents and accidents resulting in remaining disabilities to zero, and reduce the total number of accidents resulting in lost work time, no lost work time accidents and accidents causing minor injury to 50 or less Accident score: 212 or less	Serious accidents + Accidents resulting in remaining disabilities: 0 Accidents resulting in lost work time + No lost work time accidents + Accidents causing minor injury: 72 Accident score: 307	▽	56
		Safety VISION 2022 ① Safety measures in facilities ② Development of human resources with high safety awareness ③ Fostering safety culture • Action items for FY2019 • Activities to be conducted continuously with the participation of all employees • Group-wide structural reinforcement activities	• Hardware-related measures for rotating or moving parts: Continuous implementation • Promotion of the separation of vehicles from people • Enhancement of discussion-based training using CG to reproduce disasters • Full-scale implementation of repetitive training • Promotion of the commitment of general managers and higher positions • Dialogue-based inspections: Conducted for all plant managers • Full-scale development of the S-T-O-P accident campaign* (4 Works and Osaka and Tokyo Head Offices) • Emergency safety management* and priority safety management activities: Continuous implementation • Supervision of construction work: Continuous implementation • Global safety diagnosis: Started the third round • Strengthening of group-wide sharing of best practices: Started the consideration of TRAP analysis	○	55 56
Environmental preservation	Prevention of Global Warming	Achieve no increase in CO2 emissions from the FY2017 level	Reduced CO2 emissions by 13% from the FY2017 level	◎	61
		• Achievement of the targets in all items of the Action ECO-22V campaign • Implementation of environmental audits In Japan: Legal compliance audits Overseas: Legal compliance audits (China, ASEAN, the US) • Continue the practical training, in which simulated diagnosis is conducted using the actual products based on "hiyari" or near-miss reports and past audits	• Out of the 9 items, 8 items achieved the targets; Energy saving (production sites): The performance failed to achieve the target for the reduction of energy consumption per unit of sales • Implementation of environmental audits In Japan: Conducted at 3 sites • 774 persons participated in managerial post-based training	○	57 68
Social contribution	CSV Activities and Social Contribution Activities	Maintain and expand the projects that help solve social problems	See the articles from P22	○	22 36
		Enhance the activities of the SEI Group CSR Foundation	Enhance the activities of the SEI Group CSR Foundation	○	33 34
		• Implement the following fund projects ① Monetary contributions to university courses: 108 million yen ② Subsidies for academic and research programs: 30 million yen ③ Supply of scholarships: 40 million yen	• Implement the following fund projects ① Monetary contributions to university courses: 108 million yen ② Subsidies for academic and research programs: 30.9 million yen ③ Supply of scholarships: 37.9 million yen	○	35 36

Legend ◎: Target achieved and performance far exceeding the target by more than about 50%; ○: Target achieved; △: Target not achieved (performance improved from the previous fiscal year); ▽: Target not achieved (performance similar to that in the previous fiscal year); ▼: Target not achieved (performance deteriorating from the previous fiscal year)






















Glossary

*S-T-O-P Accident Campaign

This slogan represents basic rules to be followed while walking. S: Do not take a short cut and watch your step; T: Do not text or talk on the phone while walking; O: Hold on to the handrails when using stairs; and P: Do not put your hands in your pocket while walking

*Emergency safety management

Activities for emergency safety management are implemented at the operation sites designated as requiring the improvement of health and safety activities. Measures are taken in a planned manner to improve the structure.

Targets for FY2020	Targets for FY2022	Related SDGs
<p>Reduce the index for the number of complaints by 12% from the previous fiscal year</p> <p>Continue to promote Own Process Quality Assurance Activities (eleventh year)</p> <p>① Company-wide development of important measures to prevent major complaints (continued)</p> <p>② Activities to enhance the prevention of recurrence</p> <p>③ Company-wide development of the "3 points control of quality" (continued)</p> <p>④ Expansion of Own Process Quality Assurance Activities on practical themes</p> <p>⑤ Continuance of activities for company-wide dissemination (through the issuance of booklets, holding of exchange meetings and other initiatives)</p>	<p>Reduce the index for the number of complaints by 30% from the previous fiscal year</p> <p>Achievements in FY2019</p> <p>Reduction of the number of complaints by 15% year-on-year</p> <p>319 theme-based activities</p> <p>Addition of 6 examples to the booklets to introduce good practices</p>	
<p>Continue the promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement</p> <ul style="list-style-type: none"> • Continuous implementation of the survey based on the CSR procurement self-assessment sheet • Achievement of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement including Sumitomo Riko Company Limited and Nissin Electric Co., Ltd. <p>• Continue to implement the training program that supports compliance</p> <p>• Extend the application of the procurement guidelines to overseas affiliates</p>	<p>Promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement ^(Note 1)</p> <p>Achievements in FY2019</p> <p>Survey based on the CSR procurement self-assessment sheet</p> <p>Our group: Covered the suppliers that represent 90% of the value of domestic procurement</p> <p>Sumitomo Riko Company Limited ^(Note 2): Covered the suppliers that represent 70% of the value of domestic procurement</p> <p>Nissin Electric Co., Ltd. ^(Note 2): Covered the suppliers that represent 48% of the value of domestic procurement</p>	  
<ul style="list-style-type: none"> • Appointment of new SEG Global Executives • Promotion of measures to develop SEG Global Executives <p>Implement priority items</p> <ul style="list-style-type: none"> • Continuance of promotion of the talent management cycle • Further activation of Regional Executive Conferences and Area Committee activities • Continuance of the executive training program 	<p>Promotion of appointment and development of SEG Global Executives</p>	
<p>Reduce serious accidents and accidents resulting in remaining disabilities to zero, and reduce the total number of accidents resulting in lost work time, no lost work time accidents and accidents causing minor injury to 42 or less</p> <p>Accident score: 210 or less</p> <p>Safety VISION 2022</p> <p>① Safety measures in facilities: Elimination of the 3 major accidents, full compliance with "Stop, call, wait"</p> <p>② Development of human resources with high safety awareness</p> <p>③ Fostering safety culture: company-wide activities to advance to the "independent" stage</p> <ul style="list-style-type: none"> • Action items for FY2020 • Activities to be conducted continuously with the participation of all employees • Group-wide structural reinforcement activities 	<p>Serious accidents + Accidents resulting in remaining disabilities: 0</p> <p>Accidents resulting in lost work time + No lost work time accidents + Accidents causing minor injury: 23 or less</p> <p>Accident score: 80 or less</p> <p>Achievements in FY2019</p> <p>Serious accidents + Accidents resulting in remaining disabilities: 0</p> <p>Accidents resulting in lost work time + No lost work time accidents + Accidents causing minor injury: 72</p> <p>Accident score: 307</p>	    
<p>Reduced CO2 emissions by 3.0% from the FY2017 level</p> <ul style="list-style-type: none"> • Achievement of the targets in all items of the Action ECO-22V campaign • In Japan: Completion of the second round of legal compliance audits • Overseas: Enhancement of environmental management systems in affiliates • Raising the awareness of the social responsibility that companies should fulfill, in systematic environmental education 	<p>Reduce CO2 emissions by 5.0% from the FY2017 level</p> <p>Achievements in FY2019</p> <ul style="list-style-type: none"> • Achieved the targets in all items of the Action ECO-22V campaign by FY2019 • In Japan: Completion of the second round of legal compliance audits • Overseas: Enhancement of environmental management systems in affiliates • Enhanced systematic environmental education 	     
<p>Maintain and expand the projects that help solve social problems</p>	<p>Maintain and expand the projects that help solve social problems</p>	
<p>Enhance the activities of the SEI Group CSR Foundation</p> <ul style="list-style-type: none"> • Implement the following fund projects ① Monetary contributions to university courses: 108 million yen ② Subsidies for academic and research programs: 30 million yen ③ Supply of scholarships: 43.1 million yen 	<p>Enhance the activities of the SEI Group CSR Foundation</p> <p>Achievements in FY2019</p> <p>① Monetary contributions to university courses: 108 million yen</p> <p>② Subsidies for academic and research programs: 30.9 million yen</p> <p>③ Supply of scholarships: 37.9 million yen</p>	     

(Note 1) Domestic procurement by Sumitomo Electric and its domestic affiliates (excluding SUMITOMO DENSETSU CO., LTD. and TECHNO ASSOCIE Co., Ltd.) is covered.
 (Note 2) For Sumitomo Riko Company Limited and Nissin Electric Co., Ltd., the survey based on the CSR procurement self-assessment sheet was started in fiscal 2019 and the coverage for the first fiscal year was calculated based on the procurement value in each of the companies.

***TRAP analysis**

TRAP is an abbreviation of Trap Avoiding Program (a phrase coined by Sumitomo Electric). TRAP analysis aims to prevent the occurrence and recurrence of work-related accidents based on the theory of failure studies, "I thought that I was taking the right action but it caused an unfavorable result against my will (due to an unexpected trap). I will identify the trap and consider it for prevention in the future."

CSR Management of Listed Companies in the Group

Sumitomo Riko Company Limited

<https://www.sumitomoriko.co.jp/english/csr/portal>

FY2022 targets

Corporate value (Financial objectives)		Public value (Non-financial objectives)	
Net sales	530 billion yen	CO ₂ reduction	8% reduction
Operating profit	25 billion yen	Waste reduction	5% reduction
Operating profit ratio	5%	Addressing water risk	Develop wastewater recycling technology
ROA (Operating profit to total assets)	6%	Frequency rate of all industrial accidents	Zero industrial accident
ROE (Return on equity attributable to owners of the parent company)	7%	Compliance training	Participation rate of global executive training shall be 100%

*Yield compared with stock price rate in 2017

Sumitomo Riko issued the Sumitomo Riko Group 2022 Vision (2022V) in May 2018 to promote value-creating CSR activities that aim to enhance corporate value (financial objectives) and public value (non-financial objectives) simultaneously.

To increase corporate value, we have formulated three business strategies of "Creation of new businesses and new customers," "MONOZUKURI innovation" and "Strengthening

of global business foundations" and are committed to the four fields of "Automotive (Mobility)," "Infrastructure and Housing Environment," "Electronics" and "Healthcare," as well as the businesses for the next generation.

To enhance public value, we have set the "Sumitomo Riko Group Corporate Action Charter," "respect for human rights" and "compliance" as the fundamental principles and are committed to materiality with focus on the four priority themes of safety, environment, quality and social contribution. For example, while the reduction of CO₂ emissions by 8% (emission intensity) from the FY2017 level is set as one of the mid-term environmental objectives 2022V as part of our environmental activities, we reduced CO₂ emissions by 2.0% in fiscal 2018. In our commitment to safety, we take measures to meet the target of eliminating occupational accidents including the engagement of the president, managers and supervisors in safety dialogues and patrols, the promotion of safety improvement through the enhancement of global safety standards and safety audits. With 2022V as the milestone to be reached, Sumitomo Riko continuously aims to become a Global Excellent Manufacturing Company, which we define as a corporation that contributes to safety, comfort and the environment for people, society and the Earth.

Nissin Electric Co., Ltd.

<https://nissin.jp/e/company/report.html>

Through Corporate Activities That Support the Foundations of Society and Industry, the Nissin Electric Group Will Continue to Contribute to Creating a Vibrant Society in Harmony with the Environment.



The Nissin Electric Group was founded in 1910 by Nobu Tomizawa with the mission to contribute to the new development of the power system equipment industry. Since then, we have continued with our efforts to assist the development and expansion of power infrastructure, and as an

extension the development of the industry. Throughout the period, we have constantly upheld the "Five Trusts" with stakeholders embodied in our Principles of Activities which state "Integrity, Trust and Long-term Relationships." Based on the Basic CSR Promotion Policy, our group is committed to initiatives to reduce environmental burdens and conserve the environment with focus on coexisting with the environment, as well as fair and transparent corporate management grounded in compliance with laws and social norms at its core, while striving to further enhance the Five Trusts. We believe that it is necessary for us to focus more on solving social challenges through our business activities, and announced that we would aim to obtain certification from the Science Based Targets Initiative, an international environmental organization, for our greenhouse gas reduction targets for fiscal 2030. We plan to set the global emission reduction target by 2021 and receive certification.

In addition, we have been implemented community-based social contribution activities on an ongoing basis, while striving to improve safety and quality and disclosing information appropriately.

The Nissin Electric Group will continue to contribute to creating a vibrant society in harmony with the environment through Corporate Activities that support the foundations of society and industry.



Construction work of a mega-solar system

SUMITOMO DENSETSU engages in various fields of construction work with a focus on electricity, a key component of the infrastructure. In our medium-term management plan, Vision 19, which was initiated in 2016, we have worked to enhance our response to new energy markets and also combined a wide range of technologies in our group for technical innovations in new markets such as

mega-solar, wind power, biomass and micro hydropower, as well as IoT and other technologies, to address technological changes.

In addition to contributions through business activities, we also perform CSR activities with an emphasis on the improvement of the work environment for employees, including the commitment to safety, quality and compliance, to build better relationships with all stakeholders. Among them, safety and quality are the issues of top priority, and we make efforts to ensure safe and quality construction work through the cooperation of on-site staff with the headquarters. Since September 2019, we have developed a company-wide safety and quality improvement campaign as the final program for Vision 19. One of the achievements in the campaign is the clarification of the rules we must observe to ensure safety in work, which has been reorganized as basic rules.

We are also working actively to assist employees in the management and improvement of their health by, for example, setting up a health management office as a company-wide organization to promote coordinated health improvement activities.

We will continue to contribute to the creation of a comfortable environment that supports affluent society through business and CSR activities.



As an engineering company, Techno Associate is committed to providing solutions to challenges faced by customers and suppliers through the business to supply a wide variety of parts, which are production goods, to customers in various fields including electronics, automotive and housing. Our CSR activities have particularly focused on quality assurance and environmental conservation. In the environmental field, for example, we set targets on “expansion of the sales of environmentally friendly products,” “reduction of CO₂ emissions” and “promotion of waste recycling” every fiscal year and perform self-assessment based on the targets and actual performance to improve the

results of our environmental conservation activities. To ensure that all employees can display their abilities to the fullest, we also promote diversity and inclusion and are actively committed to respecting human rights and occupational safety and health management. Moreover, we work for the development of a corporate governance system, compliance and risk management to strengthen the foundation of our business operation. We will continue to adopt an attitude of gratitude, which is mentioned in our business policy, to all stakeholders who support our business activities, and act in a manner that embodies the attitude.

Relationships with Stakeholders

	Outline of the stakeholder	Main responsibilities of the Sumitomo Electric Group	Main means of communications	
Sumitomo Electric Group	Central and Local Governments	For us, central and local governments around the world are not only regulators but also customers of our products and services.	<ul style="list-style-type: none"> • Compliance with laws, regulations, administrative guidance, etc. • Tax payments • Cooperation for government policies to solve public problems 	<ul style="list-style-type: none"> • Communications through economic organizations and trade associations • Notifications, response to surveys and questionnaires • Consultation with competent authorities, public comments
	Global Environment	We promote environmental management based on our policy that places environmental conservation activities as a top business priority.	<ul style="list-style-type: none"> • Reduction of greenhouse gas emissions • Promotion of energy saving and recycling • Reduction of the amount of waste, reduction of the release of harmful chemical substances 	<ul style="list-style-type: none"> • Comply with the relevant laws and regulations • Environmental conservation activities in accordance with the PDCA cycle • Stakeholder dialogue
	Customers	We provide customers across the world with a wide range of products and services in five categories: Automotive; Infocommunications; Electronics; Environment & Energy; and Industrial Materials.	<ul style="list-style-type: none"> • Supply of socially useful and safe products and services • Improvement of customer satisfaction on all aspects including delivery time, etc. • Provision of accurate and appropriate information on products 	<ul style="list-style-type: none"> • Communication through daily operations • Newsletters, e-mail delivery, websites • Information exchange at exhibitions etc.
	Local Communities and NPOs/NGOs	The Sumitomo Electric Group conducts business activities through 416 companies located in approx. 40 countries/areas all over the world (as of March 31, 2020).	<ul style="list-style-type: none"> • Respect for culture and custom, contribution to development • Prevention of accidents and disasters, environmental conservation • Cooperation and coordination for the solution of environmental and other problems 	<ul style="list-style-type: none"> • Participation in events, support of traditional performing arts • Factory tours, opening of facilities, joint hosting of festivals • Employees' contribution to local communities • Communication through cooperation and support • Stakeholder dialogue
	Employees	The Sumitomo Electric Group has approx. 284,000 employees consisting of approx. 42,000 employees in Japan and approx. 242,000 employees in other countries. More than 80% of the Group employees thus work outside Japan (as of March 31, 2020).	<ul style="list-style-type: none"> • Respect for human rights, personality and individuality • Development, use and evaluation of human resources • Creation of a work environment where all employees can demonstrate their capabilities • Contribution to occupational safety and health 	<ul style="list-style-type: none"> • Surveys to create a lively work environment • In-house magazines, Global Magazines • Intranet, President's blog • Management council meetings for discussion between labor and management • Informal meetings between executives and employees
	Shareholders and Investors	The total number of our shareholders is approx. 61,000, and the number of shares issued and outstanding is about 800 million. By type of shareholders, financial institutions and foreign holders own 44.0% and 34.9% of the shares respectively, followed by Japanese individuals and others (11.4%) (as of March 31, 2020).	<ul style="list-style-type: none"> • Maintenance and improvement of the corporate value • Proper return of the profits (as dividends) • Timely and proper disclosure of corporate information 	<ul style="list-style-type: none"> • General meetings of shareholders • Financial result briefings • Reception of investors and interviewers • Annual reports • Investor relations website
	Suppliers	The Partners' Meeting held in fiscal 2019 gathered approx. 93 of our main suppliers. (FY2019)	<ul style="list-style-type: none"> • Fair trade • Support and cooperation for the achievement of CSR procurement 	<ul style="list-style-type: none"> • Communication through daily procurement activities • Partners' meetings • Communication through the supplier survey sheet and other channels

Disclosure of Corporate Information

The Sumitomo Electric Group Charter of Corporate Behavior stipulates that we will aim to disclose appropriate corporate information to our stakeholders to promote communication with society. In accordance with the charter, we have established a system in which information on occurred material facts and decisions is collected and confirmed by public relations sections in cooperation with relevant divisions so as to promote timely and accurate information disclosure. In addition, Sumitomo Electric established the Public Relations Committee in 2006 as a cross-sectional organization to enhance the information disclosure system. The committee engages in activities such as development of rules on corporate information disclosure, related education and knowledge dissemination within the Group and planning of measures to enhance the corporate brand value.

Communication with Shareholders and Investors

Sumitomo Electric believes that an important goal of its investor relations is to notify market participants of accurate information in a timely and fair manner, so as to obtain appropriate evaluation of our corporate value in the capital market.

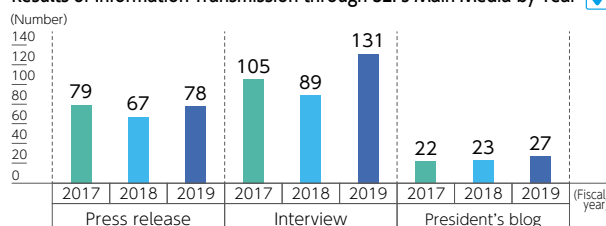
The Company works to enhance communication with institutional investors and analysts at such occasions as briefings on financial results and interviews. For general shareholders and investors, we post a wide range of information on our websites, including financial information, press releases and materials distributed in financial result briefings as well as relevant video images.

We will continuously promote fair and prompt information disclosure and further improvement of the content.

Efforts to Disseminate Information

As in the previous fiscal years, Sumitomo Electric actively disseminated information on a wide range of activities of the Group through various media such as press releases, interviews and websites to help our stakeholders enhance understanding of the Group. When we announced the mid-term management plan VISION 2022 in May 2018, we renewed our tagline to adopt "Connect with Innovation." We now promote the application of it to various media including posters, signboards and business cards. Meanwhile, we also reviewed the visual identity (VI) that aims to give consistency to designs, logos, colors and fonts throughout the Sumitomo Electric Group and establish a common impression and worldview. We are continuously working to disseminate the new VI by applying it to our company profile brochure and video, various publications and promotional materials. Moreover, we actively communicate information on the activities of our track and field team and our support to sports events such as Lake Biwa Mainichi Marathon via websites, SNSs, various types of advertisements and other media. Through these initiatives, we further increase a sense of unity within the Group while giving support to sports promotion.

Results of Information Transmission through SEI's Main Media by Year



Social Contribution

CSV Activities and Social Contribution Activities

CSV Activities

Basic Approach

In addition to monetary donations and charitable activities, we will continuously be committed to the creation of shared value (CSV) through business activities.

The business activities of the Sumitomo Electric Group are very wide-ranging in terms of technology, market and business, involving various stakeholders. Our group has always supplied useful products, technologies and services to society through business activities and promoted CSV activities based on our CSR basic policy. We will contribute to a better society and environment through a proactive and autonomous commitment to solving social challenges and continuous supply of new value to society while always being conscious of our role as a member of society.

Re-definition of the Priority Theme "Social Contribution"

While there are a host of global problems including global warming today, companies are required to develop business activities that consider the environment and help create a sustainable society. In addition, a wide range of measures are taken to solve social problems on a global scale and companies are expected to help solve global issues through

their business activities. In 2015, the Sustainable Development Goals (SDGs) were adopted at a UN summit. An international framework where private companies, as well as national governments and NGOs, can assist in solving the problems has been developed and many companies are now engaged in the activities.

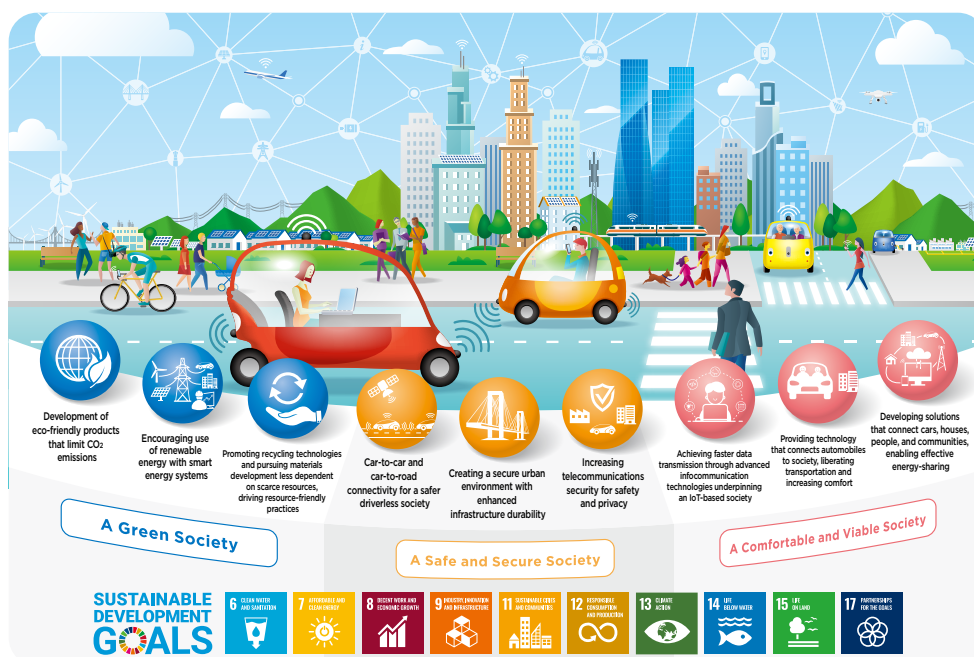
To meet such social demand and fulfill our corporate social responsibility, the Sumitomo Electric Group added "CSV (Creating Shared Value) activities" as a theme of "social contribution," one of the CSR core categories that were reviewed in fiscal 2018, along with the conventional theme of "Contribution at business locations and through the foundation" to make them two pillars for making social contribution.

Relevance to the SDGs

The picture below illustrates the values offered by the Sumitomo Electric Group for the development of a society that is projected around the year 2030 in VISION 2022. Widespread use of IoT technologies, the introduction of smart energy networks and connection of electrified vehicles and various other things will generate new services. These changes will also allow people to live a safe, prosperous and comfortable life with a sense of security in a sustainable manner around the world, according to our estimate. We have specified three forms of the ideal society we seek in such a future world, as well as nine fields for our initiatives to offer values for the society. Those values we offer are also in line with the SDGs.

While some of the initiatives are expected to be fully commercialized and contribute to the performance of the Sumitomo Electric Group only after fiscal 2022, we plan to promote them to respond to social changes proactively during the period of this mid-term management plan.

Relevance of the business of the Sumitomo Electric Group to the SDGs



Main Business Groups That Support CSV Activities

Since its foundation as a manufacturer of copper wires and cables, Sumitomo Electric Group has continuously grown through the development of related materials and manufacturing technologies and celebrated its 120th anniversary in 2017. Based on the Sumitomo Spirit, we will continue to create a large number of technologies and products that help solve social challenges and contribute to a better society and environment.

Energy Infrastructure

Redox Flow Battery



Concentrator Photovoltaic (CPV) System



Power Line Communication (PLC)



High-temperature superconducting (HTS)



Information and Communication Infrastructure

10G-EPON system



Public Infrastructure

POREFLON™ membrane-separation wastewater treatment module



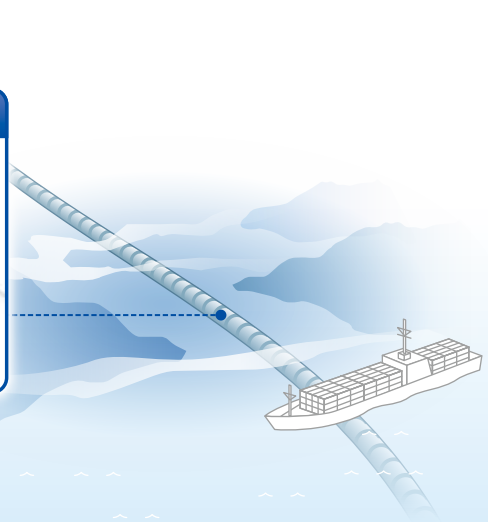
Air springs for vehicles



DC XLPE insulation cable



Ultra-low-loss optical fiber (Z-PLUS Fiber™)



Automotive/Transportation

High-strength aluminum wiring harness



Tab-Lead for on-vehicle batteries



High durability prestressing strands



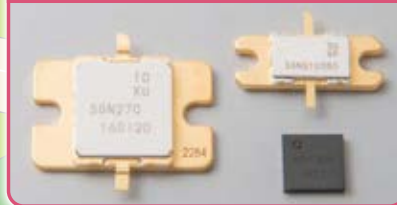
CELMET™ (porous metal)



Sintered parts



GaN transistors for cellular phone base stations



Multicore optical fiber cables



Traffic control systems



R&D Group

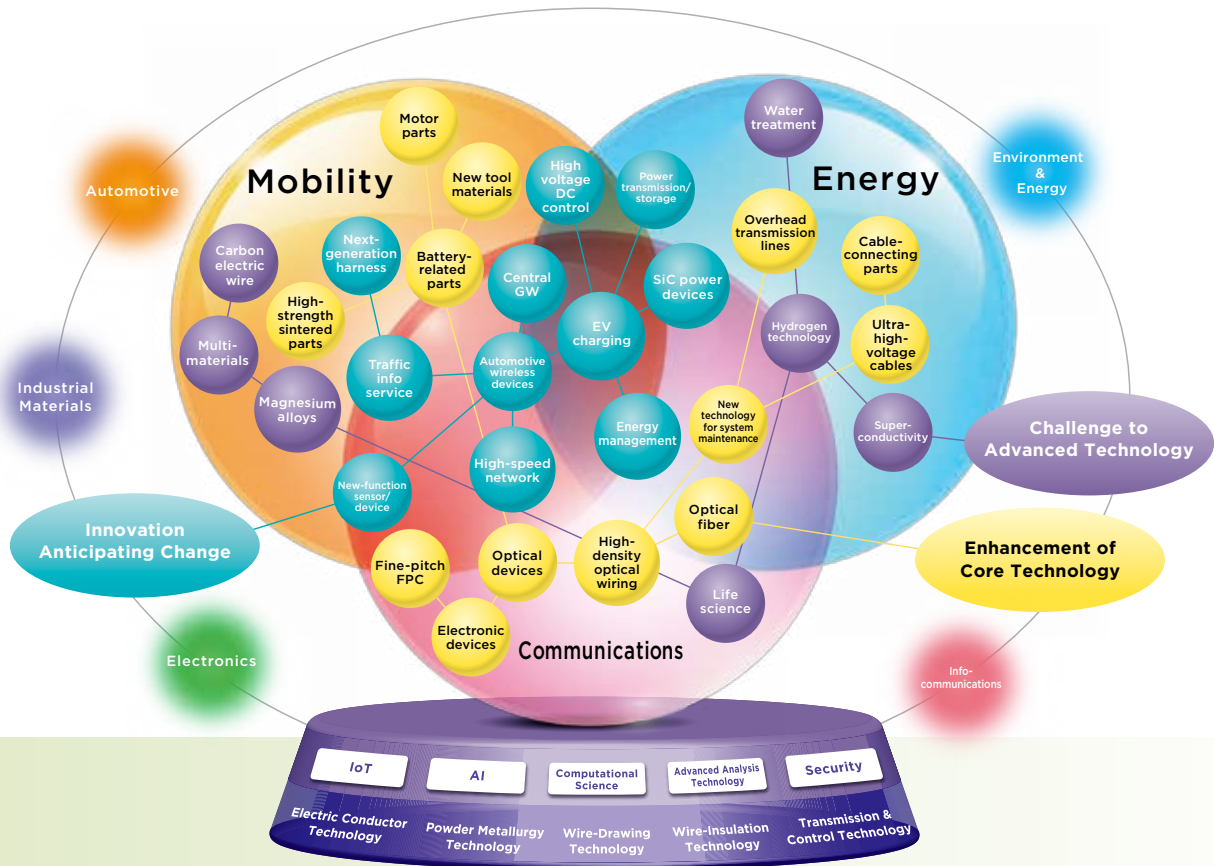
Research and Development for the Next Generation

To meet new needs on social and environmental aspects, including SDGs, our R&D Group will work for various innovations such as drastic changes in automobiles, the widespread use of renewable energy and the use of big data.

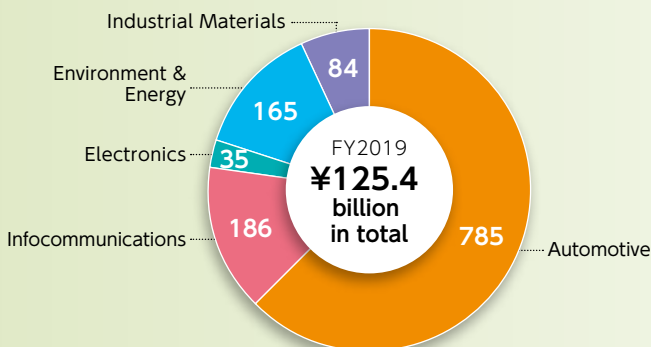
We will pursue the growth of our businesses in Mobility, Energy and Communications as well as the products and services that underpin them while taking advantage of the diversity of our businesses and technologies to create innovations and thereby contribute to the creation of a better society.

By combining the core technologies we have developed with advanced IoT, AI, computational science, analysis techniques and security, we will promote the development of new products and new businesses.

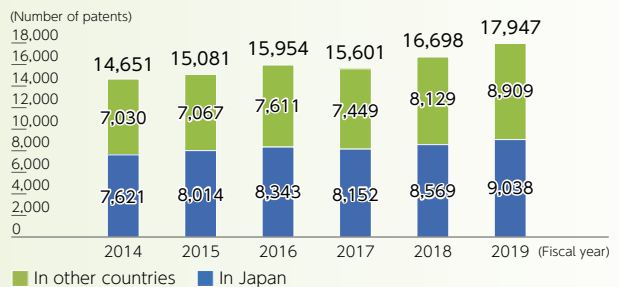
Furthermore, looking at a future society, we will make efforts to develop innovative technologies that are expected to bring major social reforms such as carbon wires, hydrogen energy and innovative materials.



R&D cost by business segment



Number of Patents Year by Year



- Figure as of December 31 of each year
- The figures in Japan are the total number of patents, utility models and designs.
- The figures in other countries are the sum of the total number of patents, utility models and designs in each country.

Automotive



Charging connector for EVs



Wiring harness



Anti-vibration rubber products



We will tirelessly pursue the development of “connectivity” technologies to support further evolution of electric cars

The recent tightening of regulations on fuel efficiency and exhaust gas emissions, as well as zero emission vehicle (ZEV) regulations, has accelerated the widespread use of electrified vehicles such as electric vehicles (EV), hybrid electric vehicles (HEV) and plug-in hybrid vehicles (PHV). Their high-voltage driving batteries require higher voltage and larger current in addition to space saving. Wiring networks, which Sumitomo Electric handles, serve as bloodstream and nerves in vehicles and it is essential to develop technologies and products that meet the requirements to play such roles.

For example, the improvement of the components and packaging techniques is required to meet the demand for space saving while the advancement of thermal control technology is a challenge in achieving a larger current. The Sumitomo Electric Group has already begun to deliver bus bar modules, as well as products to be mounted in high-voltage batteries to contain functional parts such as relays, resistors, fuses and current sensors for the supply, cutoff, distribution, etc. of high-voltage power sources, to major car manufacturers. We also have technologies for combination with space-saving wiring materials using flexible printed circuits to meet the requirements.

Our technologies will help increase the capacity of battery packs for electrified vehicles and also contribute to the extension of the driving distance and the expansion of the in-car space. While ensuring the absolute safety of vehicles, we will continue to play a part in the dissemination of electrified vehicles to reduce emissions of CO₂ and other air pollutants.



Tetsuji Tanaka
General Manager (left)
Shinichi Takase
Assistant General Manager (right)
Electrical Connecting Component Development Promotion Department
CAS-EV Development Promotion Division

Social challenges

- Prevention of global warming
- Reduction of exhaust gas emissions

Social expectations

- Development of electrified vehicles and promotion of their widespread use

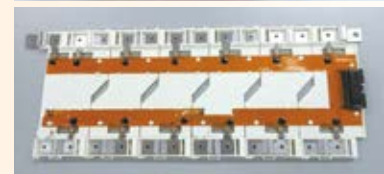
New products and technologies contributing to the solution of the challenges

- Bus Bar Module, a peripheral product for high-voltage batteries, and wiring technology

Bus Bar Module helps downsize battery modules

Batteries for driving motors can be considered as the heart of electrified vehicles. Bus Bar Module of the Sumitomo Electric Group helps downsize the battery modules used for the electric connection between electrodes.

This product functions to electrically connect electrodes of laminated batteries in series and parallel, and transmit the voltage of batteries to the control unit. The bus bar module of our Group initially adopted a style to connect small plastic casings to address various designs of battery packs developed by customers. However, further downsizing of the battery module and ensuring of a high level of safety became challenges as a result of increases in the capacity of battery packs and the number of the cells mounted to ensure driving distance. To help solve the challenges, our Group has developed a product with fuses to protect it by using flexible printed circuits, which are thin wiring.



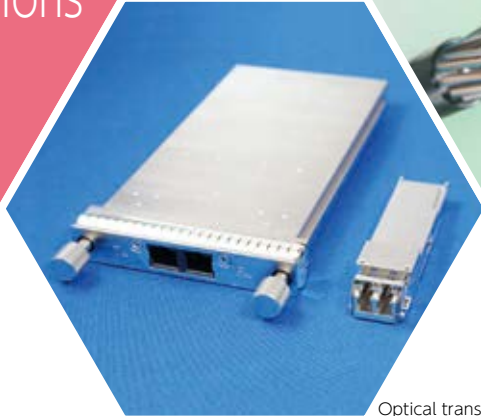
Infocommunications



Broadband network service products



Multicore optical fiber cables



Optical transceivers



We will continue to do our best to deliver stable and comfortable communication networks to people around the world

With the start of the widespread use of 5G, communication networks in the world are making major progress. It is, however, regrettable that there are still big differences in the development of communication networks between countries and regions, and the networks are not available for some people in the world. In addition, the development of networks increases the amount of information and it is now a major challenge to expand internet traffic capacity. In consideration of such circumstances, it is expected that the demand for stable and comfortable optical fiber networks will continue to grow further. Optical fiber networks cannot be established without fusion splicers that join optical fibers. The Sumitomo Electric Group has developed fusion splicers with high precision and high durability and introduced them into the Japanese and global markets. The digital divide widens the gap between the rich and the poor. To solve it, we will actively work for the dissemination of products in emerging markets where the Internet communication network has not been developed. In the future, we would like to contribute to the construction of a society where everyone can equally access information and have a comfortable life.



Ryuichiro Sato
Mechanical Design Engineering Group
Precision Mechatronics Department
Sumitomo Electric Optifrontier Co., Ltd.

Social challenges

- Widened gap between the rich and the poor due to the digital divide

Social expectations

- Universal availability of Internet access for all people at a reasonable cost

New products and technologies contributing to the solution of the challenges

- Optical fiber fusion splicers and optical fiber network construction work management services

Fusion splicer actively used in all types of jointing for optical fiber networks

The Sumitomo Electric Group develops and supplies a wide range of fusion splicers that meet various demands of customers engaged in the establishment and expansion of global optical networks. Overseas, in particular, the TYPE-72C direct core monitoring fusion splicer has earned a favorable reputation because of the high resistance to shock and splash-proof and dust-proof performance as well as the ability to join optical fiber cores with a high degree of accuracy in the construction of trunk line systems. In Japan, on the other hand, demand for a small-sized fusion splicer TYPE-201e, which is as light as about 800 grams and can be held by one hand, has grown due to large demand for fusion for Fiber-to-the-home installation work. As a unique service of our Group, we have launched SumiCloud™, a cloud service where the information on fusion splicing stored in fusion splicers is accumulated in a server via smartphones and integrated. This service allows the manager to check the status of fusion splicing promptly and control the work remotely. Our Group will continue to support the construction of optical communication networks around the world with our technologies and products to connect, operate and use optical fibers.



Left: TYPE-72C / right: TYPE-201e

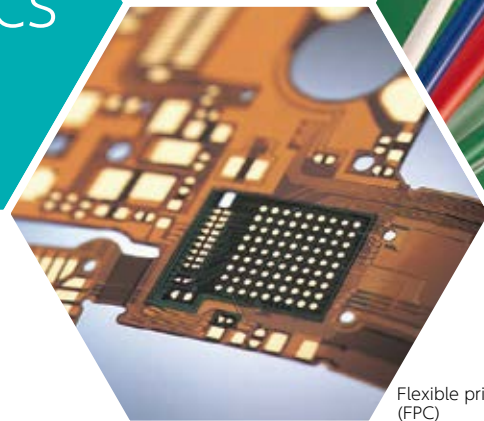
Electronics



SUMI-CARD™



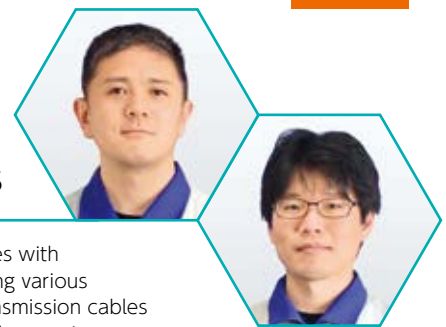
SUMITUBE™



Flexible printed circuits (FPC)



“When it comes to high-speed transmission, Sumitomo Electric is the best.” -- We will continue to make efforts to receive such words from customers



Wataru Sakurai
Assistant General Manager (left)
Masaki Suzuki
Assistant Manager,
CBA Technology Section (right)
CBA Department
Sumitomo (SEI) Electronic Wire, Inc.,

Sumitomo (SEI) Electronic Wire, Inc., a Sumitomo Electric Group company, developed cables with connectors to be used in automotive use, consumer use and the medical area while meeting various customer needs. In 2010, we started to collaborate on the development of high-speed transmission cables with the US company Intel Corp. in response to the market demand for high-speed and high-capacity transmission. Since then, we have brought Thunderbolt cable products to the market.

In 2015, our cable technology and high-speed transmission technology were combined to develop a Thunderbolt 3 cable compatible with the latest Thunderbolt standard. This is a high-end product that minimizes transmission loss of high-frequency signals and approximately doubles the transmission speed in comparison with existing general-purpose USB Type-C cables. Our Group is one of the world's largest suppliers of this product.

While we faced high technical demand initially after the launch of the project to develop the Thunderbolt 3 cable because the standard was new, the challenging efforts to tackle the issues together with the industry leader also provided a series of invaluable experiences to us. As this product has been developed to be used directly by consumers, we can witness the scenes where it changes people's lives, which makes us feel excited as the developers. We will continuously endeavor to make people think of Sumitomo Electric when it comes to high-speed transmission, while hoping to use the technologies cultivated through the development in other fields as well.

Social challenges

- Advancement of information technology

Social expectations

- Development and widespread use of transmission technologies to address increases in the amount of information

New products and technologies contributing to the solution of the challenges

- Thunderbolt 3 cable, which enables high-speed transmission

Thunderbolt 3 cable, a high-speed transmission cable suitable for 4K video signals

Thunderbolt 3, the latest version of Thunderbolt standards, is a high-speed and high-capacity external interface standard that enables bi-directional 40 Gbps transmission using a USB Type-C connector. A Thunderbolt 3 cable approximately doubles the transmission speed in comparison with existing general-purpose USB Type-C cables to enable 4K video signals to be transmitted smoothly. It also has high flexibility and softness due to the adoption of a coaxial cable, receiving favorable reviews from customers. In the development process, we aimed to combine the technology of the Sumitomo Electric Group to produce coaxial cables featuring high flexibility and bending resistance with the high-speed transmission technology. The product has the world's largest market share among those for the standard and is also commercially available under our brand.



Environment & Energy



We will combine the collective strength of the Group to increase our presence in the field of “connecting” renewable energy

In recent years, social demand for renewable energy has grown rapidly and the development of large-scale systems with hundreds of megawatts of power has been in progress. As a result, more advanced technologies are now required to enable electric power transmission with higher capacity over a longer distance. It is accordingly essential for us to conduct the integrated design and construction of the whole system with high technological strength, instead of simply combining individual products, as a solution for transmitting and transforming electricity.

Sumitomo Electric designs power transmission and transformation systems by combining its high technical capabilities as a leading electric wire manufacturer in Japan with the power receiving and transforming equipment of Nissin Electric and the construction technology of SUMITOMO DENSETSU, which are both our Group companies. We are making great contributions to the expansion of renewable energy through the reduction of costs and risks.

For further dissemination of renewable energy, it is also necessary to solve the problem of receiving capacity restriction in the utility grid. We will support the widespread use of renewable energy through the improvement of the operation rate of power transmission lines by monitoring their temperature, which is called dynamic rating, and long-distance submarine power transmission based on our world's leading DC cable technology, as well as large redox flow batteries and energy management systems.

Wind power generation sites using our power transmission and transformation solutions are starting operation one after another. While our technologies and products are usually in out-of-sight places such as underground, sea bottoms and mountainous areas, we can realize that we are fulfilling our social mission of contributing to the achievement of a sustainable society through this rewarding business.



Shuji Mayama
Chief Engineer
Power Cable Project
Engineering Division

Social challenges

- Prevention of global warming

Social expectations

- Widespread use of renewable energy

New products and technologies contributing to the solution of the challenges

- Total solutions for transmission and transformation of renewable energy

Japan's largest wind farm “Wind Farm Tsugaru” started operation

Established in Tsugaru City, Aomori Prefecture, Wind Farm Tsugaru is a large-scale onshore wind farm with a power generation capacity of 121,600 kW and 38 wind-turbines. The capacity is equivalent to the power supplied to about 90,000 general households and it is expected that the wind farm has an effect of reducing CO₂ emissions by approximately 180,000 tons in a year. The Sumitomo Electric Group has promoted the project jointly with Kajima Corporation, which is the business proprietor, since 2017 while being collectively in charge of the design, production and installation of electric facilities including underground transmission lines and substation equipment. The construction work of 41 km of collection cables from wind-turbines, 33 km of power transmission lines, three substation facilities and a monitoring control system was completed in as short as about two years to successfully start the operation. Ahead of many wind power generation projects scheduled in the future, Wind Farm Tsugaru began to operate on April 1, 2020.

Also, we are now promoting the support of design and preparing for construction in many large-scale wind power projects, including offshore wind farms that are expected to grow in the future. Our Group will be committed to total solutions for renewable energy.



Photo courtesy of Green Power Investment Corporation

Industrial Materials



Prestressed steels



Sintered parts



Cutting tools



We will continue to underpin the advancement of environmental technologies through the research and development of cutting-edge materials for products

Weight saving of cars and downsizing of engines have been required in recent years. As the engine room (including the engine and transmission) accounts for roughly one-third to one-fourth of the total weight of an automobile, progress in meeting those requirements will reduce the weight of vehicles, which can make great contributions to environmental conservation such as energy saving and the reduction of exhaust gas emissions.

The steel wires for valve springs produced by us in the Industrial Materials Group of the Sumitomo Electric Group are used mainly in transmissions, engines and other key parts. The improvement of their performance directly results in space saving of engines. While closely recognizing the needs to further enhance the performance including high fatigue strength, toughness and thermal resistance based on the comments from customers received via sales staff, as well as the demand directly listened to from customers during the visits of our technical staff, we work for the research and development of products that satisfy their requests. In addition to the improvement of performance in material composition, it is now essential to improve heat treatment, wire drawing and manufacturing techniques with the same material composition. Drawing on our expertise, we will continue to promote the development of materials that can meet the expectations of customers.



Hiromu Izumida
Precision Wire
Engineering Department
Special Steel Wire Division

Social challenges

- Prevention of global warming
- Reduction of exhaust gas emissions

Social expectations

- Development of high fuel-efficiency vehicles and promotion of their widespread use

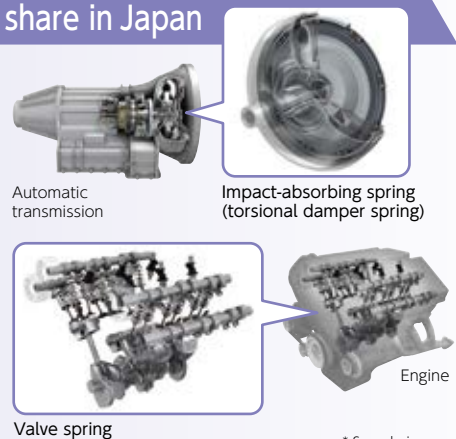
New products and technologies contributing to the solution of the challenges

- Higher fatigue strength and lighter weight of steel wires for valve springs

Steel wires for valve springs, for which we have the largest share in Japan

Valve springs are parts to support the mechanism that actuates the intake and exhaust valves of automobile engines and need to have excellent durability and heat resistance (sag resistance). Steel wires for valve springs supplied by the Sumitomo Electric Group feature overwhelmingly higher fatigue strength, toughness and thermal resistance than other steel materials.

Our Group has a history of designing various alloys by trial and error to constantly improve their performance and now has the largest share for steel wires for valve springs in Japan. We will continue to develop material designs that combine alloy design, wire drawing and heat treatment techniques to propose a further improvement of performance and cost reduction. Then, with an aim to reduce the environmental impact of automobiles, we will pursue the potential of steel wires for valve springs and other industrial materials from the perspective of environmental conservation.



Automatic transmission

Impact-absorbing spring (torsional damper spring)

Valve spring

Engine

* Sample images

New Business Development



POREFLON™ water treatment membrane module



Lithium-ion power storage system



Magnesium alloy



With the technical strength and product supply abilities we have developed, we will continue to lead the field of superconducting products

The practical use of superconducting technology has been in progress, especially in the medical field. In medical MRI systems, which require large magnetic space, superconducting magnets have been widely and practically used for about 50 years. The magnets are now applied to accelerators for proton therapy, as well as nuclear magnetic resonators (NMR), which are very effective in the analysis of organic compounds, and expected to make contributions such as the support of the analysis of the proteins that can cause Alzheimer's disease.

While the low-temperature superconducting wires developed around 1960 required expensive liquid helium, high-temperature superconducting wires that can be achieved by cooling with cheap liquid nitrogen are used nowadays. As an example, many countries in the world have already advanced into the phase to conduct the demonstration experiments of long-length superconducting power cables. The Sumitomo Electric Group succeeded in mass production of bismuth-based high-temperature superconducting wires in 2005 and the total length of the wires that have been shipped by now is equivalent to the distance from San Francisco to Chicago 2,989km. In addition to the products featuring excellent performance and quality that enable a high current to be carried stably, the strength of our Group is its ability to supply a vast amount of long-length wires. I continuously hope that the high-temperature superconducting products of our Group can make great contributions to further dissemination of superconductivity.



Takato Masuda

Group Manager
Marketing Group
Superconductivity Technology
Division,
Planning & Administration
Department

Social challenges

- Creation of new value through the advancement of science and technology

Social expectations

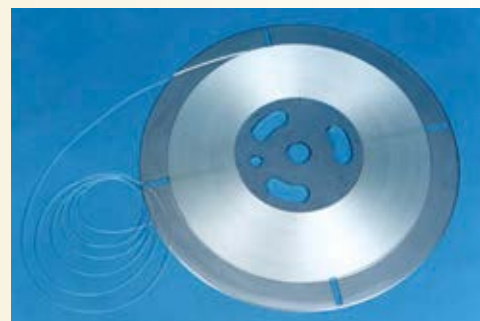
- Energy saving and space saving using superconductivity

New products and technologies contributing to the solution of the challenges

- High-temperature superconducting wire DI-BSCCO™
- Superconducting wire manufacturing technology

DI-BSCCO™, high-temperature superconducting wire for actual use with the world's best performance and quality

It is now the era of high-temperature superconductivity, which creates sufficient superconducting phenomena at the temperature of -190°C. In the field of high-temperature superconducting wires that can be used at the temperature of liquid nitrogen, we offer the DI-BSCCO™ superconducting wire, which is an innovative bismuth-based superconducting wire using pressurized sintering and other processes. With a good balance between world-class performance, quality and price, this high-temperature superconducting wire is employed in industrial products, as well as projects to develop superconducting application, all over the world. The practical superconducting wire manufactured with our unique technology and pressurized sintering process of a practical scale is among the best in the world with stable quality and also called a 1G (first grade) superconducting wire.



Social Contribution Activities

As a member of the local community, we will support the community and grow together with the people

The Sumitomo Electric Group is also committed to supporting local communities. The Administration Group of Osaka Works, to which I belong, promotes activities to contribute to the local community with the policy of "supporting the local community and growing together with the people as a member of the community." Osaka Works has actively had an exchange with local people for many years through its activities such as Rose Festa and Sumitomo Electric Cup Sports Convention. The local contribution activities of Osaka Works are wide-ranging including the opening of gyms and other corporate facilities to the public, plant tours and local cleaning activities, in addition to the organization of events. As a result of the efforts, local people now feel free to approach the company through us and I am aware that we have built a good relationship with them.

Moreover, as part of the local fire-prevention activities, we have registered three buildings of Osaka Works to the Union of Kansai Governments as refuges to be used in the event of Nankai Trough earthquakes, which is predicted to occur within the next 30 years. We also conduct regular emergency drills and other disaster-prevention activities for the whole community. While respecting opinions from local people and conducting activities in light of local characteristics, we will continue to fulfill our responsibility as a member of the community.

This year, many activities were canceled inevitably due to the COVID-19 pandemic. We need to adopt a new lifestyle and also have to change the style of our activities from now on. The Works of Sumitomo Electric have started to mutually exchange relevant information on changes in the situation and how to implement the activities. We would like to continue to make social contribution activities to maintain a good relationship with local people and further improve it.



Kenji Matsunuma
Group Manager
Administration Group
Osaka Works

Basic Policies on Social Contributions

Sumitomo Electric stipulated the Sumitomo Electric Group Basic Policies on Social Contributions, which are based on the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles, on the occasion of the 110th anniversary of its founding in 2007.

The Sumitomo Electric Group Basic Policies on Social Contributions

The Sumitomo Electric Group will proactively address voluntary social action programs, as a member of society, focusing on "respect for human resources," "attaching importance to technology," and "creating a better society and environment" in accordance with the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles, as well as widely contributing to society through its business activities, including the provision of products, technologies and services that benefit society.

- Globally promote efforts toward the development of human resources, the promotion of research and learning and environmental conservation.
- Promote community-oriented social contribution activities in the Group's business locations all over the world.
- Provide continuous support to employees' voluntary social contributions.

Under the Basic Policies, we are committed to the social contribution activities suitable for the Sumitomo Electric Group, which is aiming to be a "Glorious Excellent Company." These activities include the establishment of the SEI Group CSR Foundation as a vehicle to contribute to encouragement of research and learning activities and human resource development, as well as on donations, collaboration with NPOs, support of volunteer activities by employees and promotion of contribution to local communities.

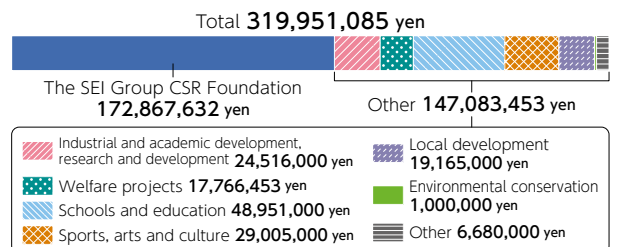
Social Contribution through Donations

We are making social contribution through donations from a global perspective

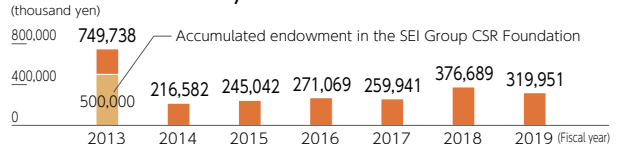
In fiscal 2019, we made donations in various areas including schools and education, industrial and academic development, R&D, art and culture, welfare, local development, environmental conservation and sports. For example, we gave financial support to symphony orchestras and opera performance as part of our efforts to assist art and cultural activities, as well as important social activities such as environmental conservation by nature conservation funds and other organizations.

We also collected matching gifts* from employees to make a donation to the Japan Committee for UNICEF, the Japanese Red Cross Society and WWF Japan. In addition, we donated relief money for the areas affected by natural disasters. We thus developed a wide range of social contribution activities.

Amount of Donations by Category (Sumitomo Electric alone)



Amount of Donations by Year



(Note) We completed the accumulation of 2 billion yen of endowment of the fund, which was the initial target, in 2013 and have donated fund for operation only since fiscal 2014.

Glossary

* Matching gift system

The company concurrently donates an amount equal to the donation made by an employee in this system.



The Sumitomo Electric Group operates in more than 40 countries and regions around the world. While respecting the culture and customs of every region and country, we are committed to various activities to support local communities with the aims of contributing to the development of local economy and society through business activities and building harmonious relations with them.

Activities in Japan

From this fiscal year, information is collected from 42 affiliates on a consolidated basis (21 Japanese companies and 21 overseas companies), including Sumitomo Riko Company Limited, Nissin Electric Co., Ltd. and SUMITOMO DENSETSU CO., LTD., which are listed subsidiaries. The expenditure on our corporate philanthropic activities was 502,000,000 yen.

※The amount is calculated based on the criteria mentioned in Attachment 2 "Examples of conversion into monetary value concerning the giving access to facilities and participation and dispatch of personnel" of the Survey on Corporate Philanthropic Activities in Fiscal 2017 by Keidanren (Japan Business Federation).

Promoting community support activities and exchange with local communities

● Local cleaning activities, promotion of greening, environmental conservation activities, etc.

Nissin Electric Co., Ltd.: Nissin Electric Forest conservation activity *1

- Performed in 17 of the 21 companies including the company mentioned above.

● Support of local fire-prevention, anti-crime and traffic safety activities

Sumitomo Riko Company Limited: Emergency Medical Care Experience Fair *2

- Performed in 14 of the 21 companies including the company mentioned above.

● Opening corporate facilities (sports grounds, gyms, etc.) to the public

Hokkaido Sumiden Precision Co., Ltd.: Shibazakura Festival *3

- Performed in 3 of the 21 companies including the company mentioned above.

● Inviting local residents and students (from elementary, junior high and high schools) to plant tour

Sumitomo Electric Sintered Alloy, Ltd.: Organizing the event a few times in a year to invite a total of about 100 students from local elementary schools, etc

- Performed in 9 of the 21 companies including the company mentioned above.

● Opening company sites to the public to organize event

Hokkaido Sumiden Precision Co., Ltd. and Hokkaido Electric Industries Ltd.: Jointly organizing Shibazakura Festival in May to receive about 1,500 visitors

- Performed in 7 of the 21 companies including the company mentioned above.

● Publishing local community magazines

Osaka Works of Sumitomo Electric in July 2019 and January 2020, Itami Works in May and December 2019 and Yokohama Works in May and November 2019



Forest conservation activity *1



Emergency Medical Care Experience Fair *2



Shibazakura Festival *3



Sumitomo Riko Soccer Festival *4

Contributing to sports and cultural activities

● Contributing to sports activities

Sumitomo Riko Company Limited: Sumitomo Riko Soccer Festival (Mr. Takayuki Suzuki, a former member of Japan's national team, was invited) *4

- Performed in 13 of the 21 companies including the company mentioned above.

● Contributing to arts and cultural activities

Sumitomo Riko Company Limited: Sumitomo Riko Charity Concert (at Komaki City Citizens Hall) *5

- Performed in 18 of the 21 companies including the company mentioned above.



Sumitomo Riko Charity Concert *5



Preschool *6

Supporting education and training

● Offering a work experience program for students and practical trainings for adults and other support

Sumitomo Riko Company Limited: Preschool *6

- Performed in 13 of the 21 companies including the company mentioned above.

● Sending lecturers and holding on-site seminars

Nissin Electric Co., Ltd.: Science class at an elementary school *7

- Performed in 9 of the 21 companies including the company mentioned above.



Science class at an elementary school *7

Activities in other countries

Promoting community support activities and exchange with local communities

- Local cleaning activities, promotion of greening, environmental conservation activities, etc.

The Kingdom of Thailand

Sumitomo Electric Sintered Component (T) Co.,Ltd.: Planting trees at Ban Som School *8

- Performed in 7 of the 21 companies including the company mentioned above.

- Support of local fire-prevention, anti-crime and traffic safety activities

The Republic of Indonesia

PT. SUMI INDO KABEL Tbk. (SIK) : Donating masks and food to local hospitals *9

- Performed in 15 of the 21 companies including the company mentioned above.

- Inviting local residents and students (from elementary, junior high and high schools) to plant tour

Ukraine

SEBN-UA: Plant tour (360 persons)

- Performed in 1 of the 21 companies including the company mentioned above.



Planting trees at Ban Som School *8



Donating masks and food to local hospitals *9

Contributing to sports and cultural activities

- Contributing to sports activities

Ukraine

SEBN-UA: Co-sponsoring a soccer competition

- Performed in 6 of the 21 companies including the company mentioned above.

- Contributing to arts and cultural activities

The Republic of Moldova

SE Bordnetze SRL: Donating the cost of equipping a vocational school in Orhei with a laboratory

- Performed in 19 of the 21 companies including the company mentioned above.



Donation to the 14th Local Contribution Committee Meeting of Thang Long Industrial Park, Hanoi *10

Supporting education and training

- Offering a work experience program for students and practical trainings for adults and other support

The Socialist Republic of Vietnam

SEI Electronic Components (Vietnam), Ltd.: Donation to the 14th Local Contribution Committee Meeting of Thang Long Industrial Park, Hanoi (donation of facilities, equipment, scholarships, etc. to local settlements) *10

- Performed in 2 of the 21 companies including the company mentioned above.

Social contribution through sports activities

The Sumitomo Electric Group supports various sports activities and also contributes to the development of local communities through the activities.



To connect with local people more through sports

Yasuyuki Watanabe
Manager, Track and Field Team,
Sumitomo Electric Industries, Ltd.

We at the Track and Field Team are striving to be trusted and loved by local people through the athletic lessons given to local kindergarten, elementary and junior high school students, "Sumitomo Electric Athletics Festa", which is an event that can be joined freely by local people, and other efforts.

I believe that our "connection" to local people encourages them to deepen their understanding of our Group, which mainly engages in B2B businesses, and also helps our employees enhance their awareness of CSR.

The Manager also plays a role in managing the organization, as well as giving instructions, which is similar to corporate management. At present, 25 athletes belong to the Track and Field Team and I coach them based on the idea that each of them should try to make a social contribution as a team member and also grow as a person under the principle of "Banji-nissei" of the Sumitomo Spirit.

I would like to continuously take initiative to hold and join athletic lessons and other events and endeavor to help the local community, our company and our team establish a win-win relationship.

Activities of the SEI Group CSR Foundation, a Public Interest Incorporated Foundation

The SEI Group CSR Foundation is a public incorporated foundation established for the purposes of developing human resources and promoting academic activities

In fiscal 2019, the SEI Group CSR Foundation received contributions of a little over 172.9 million yen in total from Sumitomo Electric (with the whole amount, including a little over 870 thousand yen donated through the cafeteria plan, appropriated for operation) and (1) donated 108 million yen in total to university courses, (2) supplied subsidies of 30.9 million yen in total to academic and research activities and (3) provided scholarships of approximately 38.0 million yen in total for 33 Japanese students and 18 foreign students learning in Japan and 130 local students studying at overseas universities.

In the program to make donations to university courses, we provided monetary support for one new courses along with the six courses continued from the previous fiscal year.

- “Elucidation of molecular mechanisms responsible for pathophysiology of diseases and clinical application by analysis of endoplasmic reticulum microfragments.” at Hiroshima University

- “Basic glycobiological research for elucidating the pathological mechanism and its clinical application” at Hokkaido University
- “Laboratory for Water, Food and Health Risk in Asia” at Yamagata University
- “Development of new cancer biomarkers that allow early diagnosis of liver metastasis” at Kobe University
- “Microbial dark matter resource use and biochemical engineering” at the University of Tsukuba
- “Eco-epidemiological control of mosquito-borne disease in Southeast Asia” at Ehime University
- “Development of IoT-based domiciliary and remote individual exercise prescription system for cardiac rehabilitation” at Shinshu University (new)

For the program to support academic and research activities, we received 163 applications. Out of them, we have selected 32 research programs including basic science research that needs research funds and exploratory study by young researchers, and offered subsidies to them.

Details on the program are introduced in the SEI Group CSR Foundation page of our website*.



Naoki Ikeguchi
Secretariat,
the SEI Group CSR Foundation

The SEI Group CSR Foundation marks its 12th anniversary. We will properly respond to changes in social demand

Having established in 2009, the SEI Group CSR Foundation operates public interest businesses with focus on the three programs: donations to university courses, the supply of subsidies to academic and research activities, and the supply of scholarships.

The donations to university courses and the subsidies to academic and research activities are mainly aimed at creative studies on natural science, engineering and sociology. The target areas are wide-ranging, such as the development of new materials, information technology, life science and economic globalization, covering both humanities and sciences. In the screening process, it is not important whether the research is related to a business of the Sumitomo Electric Group or not but the selection committee members invited from various fields make

decisions based on their comprehensive knowledge. From fiscal 2019, the scholarships are provided to students in Master's programs. We will enhance our support to motivated students to ensure that they can concentrate on academic work. While meeting the needs of the times and society, which will keep changing, we would like to continuously expand the scope of our support and properly fulfill our responsibility as a member of society.



Josue Vazquez Franco
4th semester student,
Basic Science Center,
Computer Systems Engineer,
Autonomous University
Of Aguascalientes

I appreciate the SEI Group CSR Foundation for extending a helping hand to the young people who are doing their best

Not everybody in the world gives out, that should never be forgotten. I want to thank Sumitomo Electric for helping young adults like me that put their all and are not only thankful for this kind of support, but also take advantage and reflect upon society acting in a responsible manner. This support means a lot to me, not only to me, but to my family as well. I live in a ranch that is a 30-minute walk to the highway, which is where my only source of transportation is. Everyday I travel from the state of Jalisco to the neighboring state Aguascalientes, which involves a great economic expense in tickets and time.

My dad works as a farmer, as you know, this type of work is very heavy, and poorly paid. Sumitomo helps cover my tuition, so that with this money, we can invest in other expenses. Livelihoods that support us young adults are the ones we need; they are truly inspirational and help build other companies like Sumitomo. Studying a career like System Engineering gives me a grand image of everything I can do, seeming as technology is present in everything we do, I would like to develop programs to help others. I say farewell thanking Sumitomo once again. Thank you for inspiring young adults with support like this and at the same time reiterating my commitment as a students and commitment to society.



* Details are available at the SEI Group CSR Foundation page of our website.

<https://www.sei-group-csr.or.jp/e/index.html>

Eco-epidemiological control of mosquito-borne disease in Southeast Asia
- Course on mosquito-borne infectious diseases in Southeast Asia

We will contribute to the promotion of “One Health” in Southeast Asia through the support of developing countries on health issues

The SEI Group CSR Foundation makes donations to excellent university courses that contribute to social development. One of them is a program of Ehime University that supports developing countries and contributes to genuine international exchange through research on the eco-epidemiological control of mosquito-borne infectious diseases in Southeast Asia.

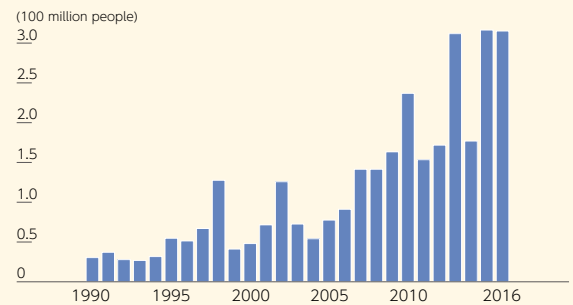


Professor Kozo Watanabe (left)
Dr. GAMBOA Mendez Maribet Ariana,
Assistant Professor (right)
Center for Marine Environmental Studies
Ehime University

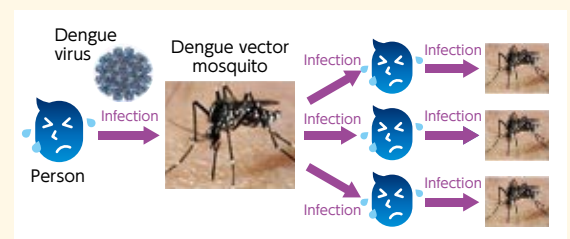
Dengue fever, a mosquito-borne infectious disease, is increasing due to climate change and urbanization

Two well-known mosquito-borne infectious diseases are malaria and dengue fever. While malaria infection usually occurs in rural areas, dengue fever infection is commonly spread in urban areas. Increases in rainfall as a result of climate change, as well as urbanization, have expanded the areas suitable for the breeding of mosquitos, which generates concern for the spread of dengue fever infection. We have established a research system for measures to control infectious diseases by linking local partner schools mainly in the Philippines and Indonesia, where dengue fever infection has been spread, with research institutions in the US and Europe. The dengue virus forms an infection cycle where a mosquito is infected with the virus through a person and then infects more than one person with it. To break this cycle, we paid notice to a bacterium called Wolbachia, which functions as a vaccine for mosquitos. Then, we found that around 17% of mosquitos in urban areas of the Philippines have Wolbachia and we are now working to breed the bacterium artificially. We plan to increase mosquitos with Wolbachia, which is expected to inhibit the infection, to control the spread of dengue viruses. We are also researching various measures from an ecological perspective, such as the estimation of the range where mosquitos can fly, the forecast of the climate change scenario and dengue fever risks and ICT-based warning of dengue fever on a real-time basis.

Number of people infected with dengue fever in the world (source: WHO)



The infection cycle of the dengue virus



Development of global human resources and establishment of a system for “One Health” research

Since dengue fever can be propagated between animals and people, it is essential to adopt the concept of “One Health” for cooperation between experts from the fields of people, the environment and animals. In developing countries, in particular, there is a serious shortage of researchers in animal-related disciplines in comparison with the fields related to people and the environment. It is urgent to develop human resources to solve the shortage. The selection of our program as a recipient of subsidies from the SEI Group CSR Foundation allowed us to invite students from Southeast Asia to Ehime University for research and also establish a short-term training program where students are sent to the US and European countries, in which the relevant research is advanced. In the future, we would like to increase the number of local research institutions in Southeast Asia and help them become self-reliant, so that students returning to their countries can play active roles there. We also aim to establish a network of collaboration between Japanese universities or research institutions and those in Southeast Asia to support each other for in-depth research.

Taking the donation to our program as an opportunity, Ehime University opened an overseas satellite office at De La Salle University in Manila, the Philippines in October 2019. A Japanese university rarely has overseas satellite facilities for research purposes and we think that it is a welcome development.



A mosquito collection team was composed of local researchers and students



Mosquito breeding facilities installed in the campus of De La Salle University, the Philippines

CSR Core Category

Quality

CSR Priority Theme
Product Quality & Product Safety

We support the solid brand power of the Sumitomo Electric Group through global quality control

While the Sumitomo Electric Group continues to operate on a global scale, quality management across the Group is crucial as it makes a great contribution to the maintenance and enhancement of the brand value of Sumitomo Electric. To this end, we directly visit domestic and overseas sites to conduct Global Quality Management System Audits and Global Quality Management Training. In the audits, we evaluate the conformance of business rules, standards and other documents, as well as the manufacturing process, with the Sumitomo Electric Group Quality Management Global Standards. The audits also aim to urge the staff to autonomously examine the problems in-depth through the correction of findings and learn lessons from them. In the remediation activities and reporting sessions after the audits, we give support using the combination of site visits, groupware and other means.

In the quality management training, we aim to disseminate the quality policy of the Sumitomo Electric Group in overseas sites by getting local staff to learn basic knowledge through e-learning and other methods and practice it through activities including exercises performed locally using materials translated into various languages mainly for key personnel. Efforts to enhance quality are essential for the sustainable growth of our Group. While we have conventionally focused our activities on China and the ASEAN region, we will expand them to cover the US and Europe as well in the future to further ensure thorough quality control on a global scale.



Takeo Komiya
Senior Assistant
General Manager
Quality Management
Division

Product Quality & Product Safety

Basic Approach

As a corporate entity involved in manufacturing, the Sumitomo Electric Group aims to provide safe, reliable and high-quality products to customers in a stable manner as a fundamental principle based on customer-oriented and quality-oriented policies. To continue to achieve this, our group works to strengthen its underlying manufacturing competence and continuously makes steady efforts to systematize daily duties as a mechanism, implement them soundly and further improve the mechanism. Sumitomo Electric has historically strived to enhance the manufacturing competence under its basic policies including participation of all employees and continuous improvement. To promote these activities even more strongly, we set up Monozukuri Technology Improvement Committee as a company-wide organization in 2015, and promote group-wide activities to strengthen its manufacturing capabilities.

As part of the efforts to systematize the daily operation, the Sumitomo Electric Group Quality Management Global Standards were established as a common framework to be applied to divisions throughout the Group in 2013. In addition, the content of the standards is reviewed and revised on an as-needed basis. The divisions of our group make continuous efforts to develop and strengthen their own quality assurance systems based on the standards so that customers can use our products with a sense of security. A company-wide quality improvement activity called the QR-1 campaign was also developed, in which we have made continuous efforts to enhance the awareness of quality among all employees through the three activities of Own Process Quality Assurance Activities, Quality Management Education and Global Quality Management System Audits.

3 Activities That Support the Company-wide Quality Improvement Activity

1. Promotion of Own Process Quality Assurance Activities
2. Quality Management Education
3. Global Quality Management System Audits

Development of QR-1 Campaign

We develop the QR-1 Campaign for the improvement of quality and reliability

As the Sumitomo Electric Group's business activities consist mainly of business-to-business (B2B) transactions, we believe that above all further quality improvement for our products will lead to greater customer satisfaction. Thus, we launched the "reliability improvement campaign" throughout the Group in 1975 based on our customer-oriented and quality-oriented policies. Since then Sumitomo Electric has carried out the campaign with the priority subjects selected according to the needs of the times. We launched the QR-1 campaign in fiscal 2002, aiming to improve quality from the viewpoint of customers, prevent quality risk and establish its structure for quality and reliability to overtake the competition.



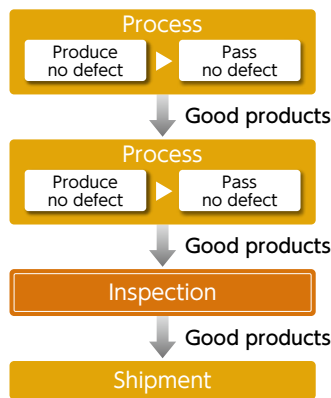
QR-1 campaign logo
QR: Quality & Reliability

“Own Process Quality Assurance Activities” Aiming for Zero Complaints

We are introducing the Degree of Quality Assurance Level-based assessment and implementing initiatives to improve the degree at overseas sites

Since fiscal 2010, we have promoted Own Process Quality Assurance Activities, which are comprehensive efforts to prevent defects in each process from being produced or passed down to the following process. As part of these initiatives, defect-free process conditions are established at the design stage and the conditions are maintained through process management at the mass production stage. In case that any defect still occurs, we work to identify the cause and improve the quality in the pursuit of defect-free process conditions.

Each division of the Sumitomo Electric Group is constantly committed to Own Process Quality Assurance Activities for their products. In addition, the Quality Management Division in the Corporate Staff Group strives to further stimulate the activities through training to develop staff members who implement the initiatives, exchange meetings between different divisions and other support for the activities.



We also promote the introduction of the Degree of Quality Assurance, which is an indicator that visualizes quality risks, as an initiative to eliminate defects in processes. In this system, the probabilities of the prevention of defect occurrence and defect flow-out are respectively determined by type of defect in each process on a four-point scale from 1st (sufficiently prevented) to 4th (not prevented), and combined to determine the Degree of Quality Assurance on a six-point scale from S to E.

To prevent complaints from occurring, we should ensure that the Degree of Quality Assurance for the type of the defect is B or higher. For example, when the prevention level of defect occurrence is 2nd (no defect produced in a normal operation) and that of defects being passed to the following process is 4th (defects cannot be prevented from being passed to the following process), the Degree of Quality Assurance is only C. There is still a possibility that defects may be passed on to the customer if no action is taken in this case, and efforts have to be made to improve the Degree of Quality Assurance to B or higher.

This system has enabled an objective assessment of quality risks and made risk reduction efforts more effective. We will continue to develop these Own Process Quality Assurance Activities on group-wide and global scales.

Degree of Quality Assurance	Rank of prevention of defect flow-out				
	1st	2nd	3rd	4th	
Rank of prevention of defect occurrence	1st	S	S	A	A
2nd	S	A	B	C	
3rd	A	B	C	D	
4th	A	C	D	E	

Rank	Status of the processes and operations
1st	A sufficient foolproof mechanism is in place and defects are prevented from being produced or passed to the following process
2nd	No defect is produced or passed to the following process during normal operations
3rd	There is a possibility that defects can be produced or passed to the following process
4th	Defects cannot be prevented from being produced or passed to the following process

Enhancement of “Quality Management Education”

Quality Management Education is developed on group-wide and global scales to cultivate the culture of “quality first”

The Sumitomo Electric Group provides employees with training on quality control at the SEI University (see “Human Resource Development” in P52 for details) to improve and ensure the quality of products and services at higher levels. In December 2019, a new training course on the enhancement of the quality assurance function was launched for managers in the quality assurance divisions for the purposes of accelerating the strengthening of manufacturing capabilities and quality improvement as well as ensuring thorough quality compliance. A total of 206 persons have taken the course as of March 2020. We will continue to give those training lessons to enhance the quality assurance mechanism.

We also work to improve various domestic education programs, such as position-based training for all employees, nomination-based training in accordance with specialized jobs and special issues and optional training to learn relevant knowledge, along with practical education including QR-J*, MKP* and GKP*. Overseas, we have initiated the personnel education activities of the Sumitomo Monozukuri Development Committee in the U.S., as well as the meetings of the Quality Management Committee in China, as opportunities to organize the exchange of information on model cases, and provided training sessions on Own Process Quality Assurance Activities. In fiscal 2019, a total of 6,492 persons, including overseas employees, completed Quality Management Education programs. The cumulative number of persons who participated in the programs since fiscal 2010 has reached 50,989.

We will continue to develop the culture of quality first through various education programs.

Glossary *QR-J
“Own Process Quality Assurance practitioner training course” to develop key persons for the Own Process Quality Assurance activities in each division.

*MKP
Abbreviation of “MONOZUKURI-KAKUSHIN professional training Program” that is the practical training program to develop candidates for future plant managers and key personnel for manufacturing.

*GKP
Abbreviation of “GENBA-KAIZEN professional training Program” that is the practical training program to develop key-personnel who are to manage and supervise manufacturing fields and promote shop-floor improvement.

Global Quality Management System Audits

We conducted audits of 119 Japanese bases and 47 overseas bases by fiscal 2019

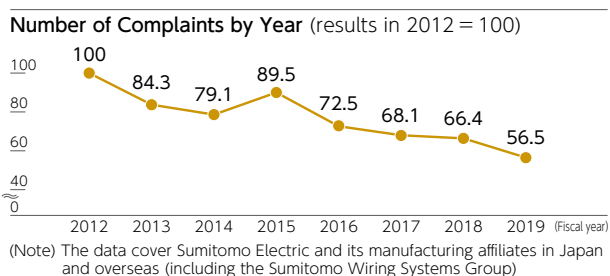
We systematically conduct Global Quality Management System Audits to evaluate the quality control initiatives of each business unit in light of the Sumitomo Electric Group Quality Management Global Standards from the perspective of customers. In these audits, we identify weaknesses of each unit in terms of management, design, manufacturing and center function to provide an opportunity to improve its quality assurance system and support its follow-up activities to reinforce the structure.

Since the start in fiscal 2010, the audits have been conducted at 119 sites in total in Japan. Progress in the improvement of the quality structure is seen as the audits are repeated. We will repeat the audits with the aim of promoting continuous improvement of the quality assurance system. Overseas, the audits were conducted in a total of 47 sites in China and Southeast Asia through collaboration with domestic units having the center function, in an effort to enhance awareness of quality among local employees. To maintain and improve the quality assurance system based on the Group Quality Management Global Standards, we will continue to check progress in compliance with the standards through the global quality management system audits.

Outcomes of the Quality Management Activities

We will continue to make steady efforts to eliminate complaints

Thanks to our ongoing quality management activities, the number of complaints is on the decrease and has been reduced by about 15% year-on-year in fiscal 2019. However, many issues still need to be improved to eliminate complaints. We will continue to make steady efforts to eliminate complaints with the three main pillars of Own Process Quality Assurance Activities, Quality Management Education and Global Quality Management System Audits, in addition to Monozukuri Technology Improvement activities.



Customer Satisfaction Improvement Activities by the Sales Group

We are committed to activities to understand the problems of customers and make proposals to help solve them

Our Group's business activities consist mainly of business-to-business transactions, and we therefore believe that the proper identification of the opinions and demands from customers (companies) through daily sales activities and further quality improvement of products and services will lead to greater customer satisfaction.

Based on this recognition, we focus on the training of the employees engaged in sales activities to enhance their abilities to understand the problems of customers and propose solutions to them. We also cooperate with external consultants to give training to management staff in Japan to learn methodologies for making proposals and methods to manage and instruct their subordinates. In addition, action guidelines to stimulate organizations have been formulated for management staff in charge of customer satisfaction (CS) improvement. We will also conduct surveys to listen to the opinions of customers, analyze the results and give feedback to ensure CS improvement.

To further increase customer satisfaction and strengthen the Sales Group as a whole in response to progress in globalization, we will make use of the opinions of stakeholders collected through our visits to customers, trade fairs, websites and other means for our future initiatives.

Quality Compliance

We aim to become a company trusted by society

The attitude of companies towards quality is evaluated by society more strictly than ever these days. Supply of products that surely have the quality required by customers in compliance with laws and rules is an absolute foundation for companies to grow in a sustainable manner. The Sumitomo Electric Group takes the measures mentioned below to ensure quality compliance.

《 Clarification of Rules on the Prevention of Quality Data Falsification and Improvement of the Education 》

We have established the Sumitomo Electric Group Quality Management Global Standards as the basic rules on quality to be followed by all divisions as mentioned above. In consideration of the cases of other companies on quality data falsification and improper inspection, we have formulated internal rules on the prevention of quality data falsification and incorporated them into the standards to disseminate the rules and ensure compliance with them. In fiscal 2018, we also started to provide education on the prevention of quality data falsification in the annual compliance training for the Group's managers in Japan. The course was attended by about 6,500 managers in fiscal 2019. In addition, we have added a curriculum on the prevention of quality data falsification to the quality management education for employees in different positions (16 position-based courses and eight nomination-based courses) to expand and reinforce our education on quality compliance.

《 Strengthening of the Function to Check Quality Data Falsification 》

While the Quality Management Division conducts Global Quality Management System Audits of each division in the Sumitomo Electric Group, we will enhance inspections for the prevention of quality data falsification in the audits. Our group also has a mechanism where all divisions conduct self-examination of their main operations every year. We have added the prevention of quality data falsification to the inspection items of the self-examination to ensure the absence of quality data falsification and check the efforts of each division to develop rules for the prevention of quality data falsification and provide quality compliance training each year.

Product Safety (Product Liability)

We are striving for the improvement of the safety level through practical training and voluntary inspection with focus on the pursuit of product safety at the product development and design stages

Under the corporate principles of “offering the very best goods and services to satisfy customer needs” and “contributing to creating a better society and environment, with a firm awareness of our social responsibility,” the Sumitomo Electric Group is making efforts to enhance the safety of products.

We adopt the basic approach that the products to be introduced to the market should undergo thorough examination of safety, especially at the development and design stages.

《 Training on Product Safety 》

For product safety, we hold annual technical seminars on the Product Liability Act and the revised Consumer Product Safety Act through cooperation between the Quality Management Division and the Legal Department.

The seminars are based on the idea that the safety standards established by companies should also take into account the predictable misuses. The content is designed to deepen the trainees’ understanding of the laws with reference to actual cases, as well as to provide practical lessons on the issues such as the review of product safety at the development and design stages, proper display of warning labels, maintenance of product safety, collection of product safety information and response to accidents.

《 Voluntary Inspection on Product Safety 》

As part of the product safety initiatives, we conduct voluntary inspection of the check items applied to the whole Group once every two years in order to identify any product safety risks.

Based on the inspection, necessary measures are discussed and implemented autonomously to strengthen the system to promote product safety measures.

Management of Chemical Substances in Products

We are managing chemical substances properly in accordance with our own guidelines based on Japanese Industrial Standards (JIS) guidelines

In pursuit of reducing environmental impact of the products of the Group and our customers, as well as improving compliance, the Sumitomo Electric Group is committed to proper management of chemical substances in products. To this end, we implement the “SEI Guidelines for the Management of Chemical Substances in Products”^(note), which was established to specify the items to be carried out at each stage of the manufacturing process such as procurement, design, production and quality assurance based on JIS Z7201 “Management of Chemical Substances in Products - Principles and Guidelines.”

We have also established the “SEI Standards for Chemical Substance Management,” which are the standards for the management of chemical substances in products to be managed at each of the stages, and implement the

“SEI Guidelines for Green Quality Purchases”^(note) based on the standards, while conducting product assessment at the design and development stages. Through these initiatives, we strive to prevent hazardous chemical substances with large environmental impact such as mercury and cadmium from being contained in products.

In fiscal 2019, we started to audit divisions and affiliates of our Group on the management of chemical substances in products to improve the management system for these substances on a group-wide basis.



(Note) As the types of products and requirements from customers differ greatly between divisions and affiliates, the guidelines and standards are applied flexibly according to their respective circumstances.

Compliance with Regional Regulations on Chemical Substances across the Globe

We are promptly responding to progressive tightening of regional regulations on chemical substances across the globe

The Sumitomo Electric Group has taken measures to replace the substances listed in the EU RoHS* and ELV Directives*, and is meeting customer demand for products that contain no prohibited substances. For example, we started to totally eliminate the direct use of four types of phthalates banned by the RoHS Directive in our products in fiscal 2017 before the implementation of the regulation in July 2019. We have also discontinued the use of these substances for the parts to be used in our products through cooperation with suppliers ahead of the start of the regulation.

At the same time, to comply with the REACH* regulation, we are working for final registration of chemical substances one by one as required and completed the registration of gallium arsenide (GaAs) in 2012 and tungsten carbide (WC) in 2017. We are also making efforts to ensure appropriate responses to the requirements of the REACH regulation including reporting of the SVHC* contained in products.

To quickly respond to progressive tightening of regional regulations on chemical substances across the globe, our group is working to collect information on regulations in Europe, China, Southeast Asia and other countries and share the information within the Group.

Glossary

* RoHS Directive

RoHS stands for Restriction of the use of certain Hazardous Substances. This EU Directive restricts the use of certain hazardous substances in electrical and electronic equipment.

* ELV Directive

ELV stands for End of Life Vehicles. This EU Directive restricts the use of lead and three other hazardous heavy metals in automobiles to reduce the impact of end-of-life vehicles on the environment.

* REACH regulations

REACH stands for Registration, Evaluation, Authorization and Restriction of Chemicals. Regulations of the European Parliament and of the Council for protection of human health and the environment in the European Union.

* SVHC (Substances of Very High Concern)

SVHC stands for Substances of Very High Concern. Chemical substances designated by the EU as substances which may cause serious effects to human health or the environment.

Using various data, we aim to establish strong and healthy relationships with suppliers

Under the current circumstances where massive natural disasters occur more often and infectious diseases such as the COVID-19 are prevalent, the establishment of a robust supply chain is essential for the business continuity of the Sumitomo Electric Group and has also started to attract attention from various stakeholders.

I belong to the Administrative Department of Procurement Division and am now in charge of the establishment and operation of a system to summarize information on suppliers to strengthen the supply chain of our group. In addition to the financial information and the details and size of transactions of suppliers, we now handle diverse information including the BCP risks of the production areas and the results of CSR procurement surveys. While the main task of the system was the accumulation of data until now, we have advanced to the stage to make effective use of the data for the sophistication of supply chain management. When disasters occurred due to a big typhoon, etc. in 2019, we were able to check the impact on suppliers promptly as an initial response in BCP, which made me recognize achievements from the daily operation of the system. Proper management of the supply chain does not only help our group avoid risks but also gives benefits to suppliers because it enables us to provide the necessary support to them. We will be continuously committed to the establishment of even more robust and healthier relationships with them.



Kentaro Suzuki

Planning Group,
Administrative Department,
Procurement Division

Supply Chain

Basic Procurement Policies

We share our Basic Procurement Policies with main suppliers and seek their understanding and cooperation

The Sumitomo Electric Group considers procurement to be a “service that supports the foundation of its business activities,” and in May 2006, established Basic Procurement Policies in line with the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles. We have distributed the Basic Procurement Policies to our main suppliers, along with our Group companies, and have sought their understanding and cooperation.

Basic Procurement Policies (extract)*

1. Promoting procurement activities that contribute to creative and global corporate activities
2. Promoting fair and impartial procurement activities
3. Promoting compliance-based procurement activities
4. Promoting procurement activities based on mutual trust and cooperation with suppliers
5. Promoting procurement activities friendly to the global environment

Group Procurement System

We are working to ensure thorough compliance with our policies and enhance awareness among procurement staff on a global scale

Based on the Basic Procurement Policies, the procurement measures and activities of the Sumitomo Electric Group are developed under the initiative of the Group Procurement Collaboration Office, an organization established in the Procurement Division. The office is composed of the staff in charge of procurement in 22 divisions and Group companies including Sumitomo Riko Company Limited and Nissin Electric Co., Ltd.

Specifically, these divisions and Group companies work together to promote value analysis (VA*) and provide education to enhance compliance related to procurement and improve procurement skills. An e-mail magazine is also distributed to more than 400 procurement staff members to share necessary information throughout the Group. Overseas, we promote coordinated procurement on a regional basis under the initiative of the International Procurement Offices (IPOs) of the Procurement Division located in China, ASEAN, the United States and Europe. As part of the efforts, we organize meetings of liaison committees composed of IPOs and procurement staff of Group companies to develop group-wide initiatives and provide related training to procurement staff.

Initiatives to Ensure Compliance with Laws Related to Procurement

We are conducting on-site inspections of divisions and affiliates and giving them instructions to facilitate their independent activities for compliance in procurement

The Procurement Division is committed to the following three priority matters in its efforts to ensure compliance with laws related to procurement:

Priority matters

- Compliance with the Subcontract Act* in regard to appropriate dealings with subcontractors
- Compliance with the Customs Law in regard to appropriate custom reports and payments
- Compliance with internal control rules in regard to procurement in the Sumitomo Electric Group

As to the priority matters, we continued to conduct on-site inspections in Sumitomo Electric and its affiliates in fiscal 2019 to confirm compliance with the rules as mentioned in the table below.

Inspection results



Subcontract Proceeds Act	In Japan: 7 affiliates (8 bases)
Internal Control	In Japan: 7 affiliates (8 bases) Overseas: 23 affiliates
Customs Law	In Japan: 26 divisions of Sumitomo Electric and its affiliates importing directly from overseas

In the on-site inspection, the Procurement Division visits the target sites to check compliance with laws related to procurement. For the inspection on the Subcontract Proceeds Act and internal control, we selected the target sites again in fiscal 2019 on the assumption that we will regularly visit all domestic affiliates, and confirmed their compliance with relevant laws and rules. With respect to the Customs Law, all of the sections and companies importing directly from overseas were inspected to check the correctness of the amounts in custom reports and other items, and we gave guidance on revisions of the Customs Law and other laws.

The Procurement Division will continue to expand and improve the education and inspection activities to promote compliance with laws related to procurement.

Response with Business Continuity Plan (BCP)

Our efforts to strengthen the system for stable procurement are producing steady results

Sumitomo Electric Group is committed to the development and implementation of a business continuity plan (BCP) for procurement divisions, which prepares for large-scale disasters and other emergency situations, to ensure stable supply of products and services and thereby avoid impact on the production activities of our customers. The BCP assumes a situation that the suppliers of our parts and materials have suffered damage from disaster and suspended production activities. In addition, if a disaster occurs, emails are sent to the emergency contact addresses of the suppliers registered in advance in the system to grasp the extent of the damage in a prompt and accurate manner and thereby minimize the impact. In fiscal 2019, we had fears of a supply shortfall due to a series of natural disasters including Typhoon Faxai, which caused devastating damage to Chiba and other prefectures in the Kanto region. In these situations, nevertheless, we were able to procure materials without impact on our production or that of our customers by, for example, using the alternative products that had been examined in the above-mentioned activities and receiving supply preferentially with the cooperation of our suppliers. These incidents reminded us of the significance of such activities.

At present, due to the impact of the COVID-19 pandemic, close attention is given to problems in the supply chain caused

by the suspension of operation, as well as decreases in the operating rate, in some suppliers in China, the US, Europe and Southeast Asia. While we have fears of a supply shortfall for about 200 items, there has been no serious impact on our production activities so far with reports from suppliers on their operation status and other issues and adjustment of delivery dates by them. We will maintain these activities and continue to exchange information with suppliers to strengthen our procurement system and ensure the stable supply of products and services.

Education System

We provide training to improve procurement skills on group-wide and global scales

As in the previous fiscal years, we provided training for Production Group and Corporate Staff Group, as well as training for R&D Group, in the Procurement Compliance Training Seminars in fiscal 2019.

The training for Production Group and Corporate Staff Group is organized as training via a video conference system and as delivery lectures with the same content every year to further enhance the understanding among the attendants and establish and improve their awareness of compliance. While the training was provided only via a video conference system due to the impact of COVID-19 this fiscal year, we will continue to organize training in a way that more Group employees can attend them to further enhance the awareness of compliance related to the procurement of materials within our group.

Training for R&D Group was provided to ensure that the staff can not only learn the procedures to obtain necessary materials for R&D activities but also understand the need to establish a proper cooperative relationship with suppliers at the time of the commercialization of R&D outcomes. The results of the training are presented in the table below.

Results of training



Production Group and Corporate Staff Group	<ul style="list-style-type: none"> • Organized in 12 regions (video conference) • Attended by 766 persons • Themes: Subcontract Proceeds Act, Customs Law and internal control
R&D Group	<ul style="list-style-type: none"> • Organized in 2 regions • Attended by 25 persons • Themes: Subcontract Proceeds Act, internal control and procurement for the commercialization of research outcomes

In the Procurement Division, an OFF-JT* program for working staff is provided for the purposes of development of reliable procurement staff and handing down of procurement ethics, knowledge and expertise. This program is also combined with existing OJT* to create a synergistic effect that will improve procurement skills.

In fiscal 2019, seven courses including "procurement-related laws and regulations, and CSR procurement" were provided by giving lectures through teleconferences with sites in Japan and overseas. In total, 223 persons attended the lectures. We also have to make the Subcontract Proceeds Act known widely not only in the divisions in charge of procurement but also in manufacturing and development divisions. For this reason, we organize a training program to develop key personnel on the act, which means core personnel for the establishment of an autonomous system to comply with the act in each division and company, in a planned manner.

A training program for overseas purchasing managers was launched in fiscal 2017 with an aim to develop the core personnel for the improvement of our procurement capabilities on group-wide and global scales. In this program, we provide the managers with opportunities to learn procurement-related methods for cost reduction, risk management and other issues, as well as the Sumitomo Spirit and CSR and other procurement policies, in order to improve their skills and encourage them to share the learning with the procurement staff of their companies. While improving the content of the training, we will gradually expand the scope of the employees who need to attend the program in the next fiscal year and thereafter.

Results of Education

	Date	No. of courses	No. of lectures	No. of participants (total)	No. of companies
OFF-JT Education program	1st half of FY2019	7	26	122*	23
	2nd half of FY2019	7	26	101*	23
Key personnel development program	2nd half of FY2019	1	4	11	10
Training for overseas purchasing managers	2nd half of FY2019	1	1	5	5

*Number of those who passed the final exam

Contribution to Preservation of the Global Environment

We are committed to green procurement as an essential quality factor

To promote environment-friendly procurement activities, the Sumitomo Electric Group has made efforts to eliminate the use of banned substances in its products and enhance control of other harmful substances contained in products, based on the Sumitomo Electric Group Green Procurement Guidelines since fiscal 2003. In fiscal 2012, these guidelines were revised to issue SEI Guidelines for Green Quality Purchases as a new version. We consider the guidelines as part of essential quality standards and use them to maintain green procurement activities. While we introduced the ECO Factoring System in collaboration with Sumitomo Mitsui Banking Corporation in 2009, 63 suppliers have applied for the system and 46 of them use it now. In this system, a favorable interest rate is applied to suppliers that promote a certain level of environmental conservation activities in order to encourage suppliers to perform such activities.

Commitment to CSR Procurement

We also ask our suppliers to comply with the CSR Procurement Guidelines by specifying compliance with them in the basic transaction agreement

To promote our commitment to CSR in the procurement activities, we established the Sumitomo Electric Group CSR Procurement Guidelines based on the Sumitomo Electric Group Corporate Principles and Charter of Corporate Behavior in August 2010. The guidelines were revised to include provisions concerning response to the issue of conflict minerals* in fiscal 2014. To enhance promotion of the guidelines, we also ask suppliers to take proper action by specifying relevant requirements in the basic transaction agreement. For the promotion of CSR procurement, in addition to activities to disseminate the guidelines among suppliers, we need to check the progress in the dissemination through CSR procurement self-assessment of suppliers and also promote improvement activities in full coordination with suppliers.

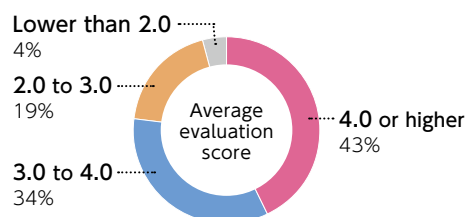
Sumitomo Electric Group CSR Procurement Guidelines (extract)**

The Sumitomo Electric Group aims to contribute to creating a better society and environment, with a firm awareness of our social responsibility. To this end, the suppliers that directly or indirectly provide their products and services for us are also required to work on the activities together with us. Therefore, we have summarized our requests to the suppliers of the Sumitomo Electric Group in these guidelines, and the suppliers are requested to promote compliance with them. Our suppliers are also asked to request their suppliers to comply with the guidelines.

1. Provision of Useful and Safe Products and Services
2. Improvement of Technological Capabilities
3. Promotion of Sound Business Management
4. Contribution to Preservation of the Global Environment
5. Compliance with Laws and Social Norms and Fair and Proper Business Activities
6. Social Contribution and Elimination of Antisocial Forces
7. Respect to Human Rights and Considerations of Occupational Health and Safety (Including Responsible Procurement of Minerals)
8. Disclosure of Information and Promotion of Communication with Society
9. Maintenance of Confidentiality and Information Security

We started to survey our divisions and domestic affiliates (excluding the listed subsidiaries) in fiscal 2013. In the three years from fiscal 2017 to 2019, approximately 1,750 suppliers, which represent 90% of the value of our domestic procurement, cooperated with the survey. As shown in the figure below, more than 40% of the suppliers received a score of 4 or higher out of 5. As to particularly important items, we have an interview with the selected suppliers or conduct an on-site inspection and ask them to enhance compliance, information management and other relevant activities. For the suppliers with a low score, we will try to improve their CSR procurement through the organization of workshops and other measures. We also surveyed the suppliers of our overseas affiliates, mainly those in China and the ASEAN region, and have continued the survey since then.

Results of the domestic CSR procurement survey from fiscal 2017 to 2019



Among our group companies, we began to strengthen cooperation with Sumitomo Wiring Systems, Ltd., Sumitomo Riko Company Limited and Nissin Electric Co., Ltd. in fiscal 2018 and launched a CSR procurement survey of them in fiscal 2019. Each of them is scheduled to meet the target of conducting CSR procurement from the suppliers that represent 90% of the value of its domestic procurement in fiscal 2020.

From fiscal 2020, we will further improve the conventional activities and enhance coordination with Group companies to meet the target of "Promotion of CSR procurement covering the suppliers that represent 90% or more of the value of our domestic procurement" and increase the level of CSR procurement.



Activities from fiscal 2013 to fiscal 2019 and future initiatives

2013 ▼ 2016	<ul style="list-style-type: none"> Establishment and dissemination of the CSR Procurement Guidelines Implementation of a survey with a CSR procurement "self-assessment sheet" (a total of approximately 1,930 suppliers) (covering the suppliers that represent 90% of the value of the domestic procurement excluding that for Sumitomo Wiring Systems, Ltd. and the listed subsidiaries, as well as suppliers of some of our overseas affiliates)
2017 ▼ 2019	<ul style="list-style-type: none"> Continuance of the survey of suppliers (a total of 2,020 companies) (covering the suppliers that represent 90% of the value of the domestic procurement, as well as suppliers of some of our overseas affiliates, excluding the listed subsidiaries) On-site inspections and interviews of suppliers to ask for improvement (86 companies in fiscal 2017, 86 companies in fiscal 2018 and 37 companies in fiscal 2019) Started the CSR procurement survey in Sumitomo Riko Company Limited and Nissin Electric Co., Ltd.
2020 ▼ 2022	<ul style="list-style-type: none"> Promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement Gradual expansion to include major suppliers of our overseas affiliates

Percentage of CSR procurement in the value of the domestic procurement in Group companies

	By fiscal 2019	By fiscal 2020
Sumitomo Electric Industries, Ltd.	90%	90%
Sumitomo Riko Company Limited	70%	90%
Nissin Electric Co., Ltd.	48%	90%

Commitment to Responsible Procurement of Minerals

We aim to realize the responsible procurement of minerals with the recognition that it is a serious social issue

To meet the target of "Promoting compliance-based procurement activities," our group recognizes that the risks listed in the Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance Annex II, such as the issue of conflict minerals in Congo and its neighboring countries and cobalt-related issues including child labor in the worst form, as well as the violation of human rights and labor issues in conflict-affected and high-risk areas (CAHRAs), are serious social issues related to the supply chain. To fulfill our social responsibility in procurement activities, we aim to realize responsible procurement of minerals through no procurement or use of conflict minerals involving any of such illegal or dishonest acts as raw materials. To this end, we also stipulate the approach to the initiatives in the CSR Procurement Guidelines and investigate the supply chain on the minerals involving those illegal or dishonest acts. In the event that the use of minerals that may cause human rights issues or other social problems or serve as a fund for armed groups is found, we will take measures to avoid their use.

As a specific initiative, we ask suppliers to cooperate with our investigation mentioned above, which is conducted every year. In case that there is any concern over the use of minerals, the relevant suppliers are requested to take measures to avoid the use as we do in the Group.

Organization of Partners' Meetings

Ninety-three suppliers participated in Partners' Meetings

The Sumitomo Electric Group organizes Partners' Meetings every year to enhance its relationships with suppliers. We use this opportunity to explain the outline of our business activities and the Basic Procurement Policies and commend the suppliers that have contributed to the business activities of our group through good proposals and support activities in order to

establish amicable and cooperative relationships with suppliers. At Partners' Meeting, we also present the CSR Procurement Guidelines, as well as the Basic Procurement Policies, to ask for their cooperation and promote the guidelines actively.



Partners' Meetings



Based on a belief that CSR activities form the basis of a company, we will continue to work for sustainable growth

Ms. Keiko Nishioka President (center)

Mr. Daiki Yasui
Manager of Operation Department and Group Leader of Machine Manufacturing Group, Manufacturing Department No. 1 (right)

Ms. Yuki Maeno
Future Strategy Section, Operation Department (left)
Hikari Kikai Seisakusho Co., Ltd.

Our company combines cutting-edge technologies with traditional skills of craftsmen to design and produce special-purpose machine tools (grinding machines), process cutting tools with high precision and manufacture products, mainly customized products, in the field of ultrafine laser processing. In the history of 74 years since our establishment, we have had a relationship with the Sumitomo Electric Group for more than 50 years through the receipt of orders for the processing of cutting tools, as well as the sales of cutting tools of the IGETALLOY™ brand and our grinding machines. The trust relationship and stable business relationship with the Sumitomo Electric Group, which has solid philosophy, also underpin our efforts to work in various fields. While it is often considered that CSR activities pose a burden on small and medium-sized firms, we value them as the basis of corporate management. While companies are required to fulfill their social responsibility these days, employees also need to understand the goals pursued by society and companies including CSR, ESG and SDGs. To this end, we are committed to human resource development and try to create a culture where each employee takes voluntary actions through the organization of business management classes, mental health seminars and other initiatives. Those efforts have resulted in the recognition of our company under the 2020 Certified Health & Productivity Management Outstanding Organizations Recognition Program (SEM Category) of the Ministry of Economy, Trade and Industry of Japan and Nippon Kenko Kaigi, as well as the selection as one of the 50 Leading Companies for Women in APEC. To envisage and design business for the creation of new value, we set up the Future Strategy Section, which is composed of young employees with sensitivity to changes of the times, in May 2020. Under our fundamental policy "Be Professional!," while continuously working to ensure that the company can grow in a sustainable manner as a place where employees can feel rewarded and recognize their growth, we will strive to make social contributions.

Human Resources

Promotion of Diversity and Occupational Safety

Being acutely aware of the importance of protecting people's lives, we will expand the health and productivity management* more actively

Sumitomo has inherited the spirit of "People make the enterprise" as a tradition and the Sumitomo Electric Group has also established the idea that employees and their families should be valued. We announced the Sumitomo Electric Group Health Management Declaration in 2015 and started to promote health and productivity management on a full scale with the launch of "Kenkatsu!" activities in June 2017. As the initial action for the management, we specified (1) Prevention and improvement of metabolic syndrome, (2) Mental healthcare and (3) Contribution to sports activities as the key items and set KPIs for them. As the KPI for the initiatives to prevent and improve metabolic syndrome, we have adopted the metabolic syndrome rate. While the rate in Sumitomo Electric is still worse than the national average, we are making various efforts to improve it including the provision of advice from industrial physicians and training programs by professional instructors to applicants, and the efforts have begun to show results. For mental healthcare, we are committed to an extensive subject of creating a comfortable workplace and promote "Shokuba-dock," in which the working environment and the stress on employees are checked to encourage each workplace to consider solutions voluntarily. As to sports, a feature of our commitment is that we aim to make social contributions through sports activities mainly with our track and field team, instead of focusing only on the health management of employees. In recognition of those efforts, Sumitomo Electric was selected for the Health and Productivity Stock Selection Program for the first time in March 2020. Health and productivity management is essential for the growth of our Group. We renewed the awareness of the importance of protecting the lives of employees through our commitment to addressing COVID-19. In the future, while paying attention to the mechanism of culture and society in each of the countries in the world, we will promote health and productivity management on a global scale.



Takehiro Kazehaya
General Manager,
Sports & Wellness Project
Promotion Office
Personnel Department

Diversity

Global HRM Policy

We are actively promoting the establishment of HR systems and guidelines to be commonly applied on a global scale within the Group

In the Sumitomo Electric Group, over 280,000 employees are working actively in about 40 countries around the world. We believe that for Sumitomo Electric to win the global competition and grow further, it is essential that we fully mobilize the Group's technologies, products, business models and all other resources, and we acknowledge that it is most important to secure and utilize highly capable employees who support the efforts.

The Group has traditionally attached a high value to human resources based on the Sumitomo Spirit. To clarify the basic policies on human resources, we instituted the Sumitomo Electric Group Global Human Resource Management Policy (Global HRM Policy) in September 2011.

This policy specifies the Group's commitment to creation of an environment that helps employees realize growth and self-actualization through work, provision of various career opportunities regardless of race, ethnicity, national origin, religion, age, gender, gender identity, sexual orientation, or disability, promotion of diversity and development of global leaders, in order to accelerate our global human resource recruitment and promotion. We have declared the policy to inform people in and outside of the Group about it.

Global Human Resource Management (HRM) Policy

- We provide workplaces where all the employees can work actively, grow both personally and professionally through work, achieve self-actualization, and contribute to society.
- We offer various career opportunities and globally pursue "the right person in the right position" regardless of race, ethnicity, national origin, religion, age, gender, gender identity, sexual orientation, or disability.
- We value and promote diversity in the workplace in order to enhance the creativity of the organization and to sustain the growth of the business.
- We develop global leaders who lead and give energy to our global business. Global leaders are those who understand and share the Sumitomo Spirit and the Corporate Principles and can lead highly diversified teams.

Global Grade System and Group Global Executive Personnel System

We will promote the involvement of SEG Global Executive and other international employees in the business management

We have adopted the Global Grade System, which is a human resource development system that allows talented and qualified persons to seek career development beyond the borders of individual companies to engage in the management of Group companies in Japan and overseas or perform even higher duties. We give board members and

equivalents from overseas subsidiaries, except for those of listed companies, the global leader (GL) grade, and recognize them as SEG Global Executives. At present 43 persons, most of whom are executives of overseas Group companies, are recognized as the SEG Global Executives. They are provided with a wide range of career opportunities to help them play more active roles as global leaders.

《 Area Committee 》

We introduced the Area Committee system in 2015 to allow SEG Global Executives to participate in business management beyond the borders of individual companies. The system aims to 1) enhance the presence of each business/base in consideration of the regional characteristics, 2) make use of the knowledge and experience of SEG Global Executives and 3) establish a network of the SEG Global Executives. We have set up four committees of Americas, Europe, Southeast Asia/Australia and Greater China, which are committed to a wide variety of subjects, such as human resource development and strengthening of manufacturing abilities in the respective regions.

We also use the Regional Executive Conference to incorporate the proposals presented by the Area Committees into the management of the Sumitomo Electric Group. In this conference, which is held in the four regions of Americas, Europe, Southeast Asia/Australia and Greater China, top executives of Sumitomo Electric and its overseas affiliates gather every year to discuss global management issues. We will continue to make the conference more active to further promote diversity management in the Sumitomo Electric Group and coordination between affiliates.



Sumitomo Electric Monozukuri Development Committee Americas 5th Kaizen Summit

《 Encouragement of International Employees to Work in Japan 》

With the aims of providing SEG Global Executives with more opportunities to demonstrate their abilities and cultivating the next generation of SEG Global Executives, we will encourage international employees to work in Japan. In 2018, we established guidelines for the procedures from the selection of the candidates to acceptance in Japan. We will continue to make efforts to improve the supporting program for international employees working in Japan.

《 Development of a Global HR Database with an aim to establish processes for development and promotion 》

To understand human resources of the Group on a global scale in a seamless manner, as well as to provide various career opportunities to competent and enthusiastic staff and to cultivate and promote them, we have established a global

HR database. Business Units use the database to hold meetings with executives that aim to identify excellent staff and create development and promotion plans.

《 Establishment of a human resources infrastructure through the application of common human resources measures and processes to all Group companies in Japan and overseas 》

Our Group companies conventionally formulated their own human resources rules, established and operated different HR measures. We recognized that it is necessary to standardize the HR measures and management processes to some extent among our Group companies in Japan and overseas in order to further proceed with group-wide and global management based on the Global HRM Policy. In fiscal year 2017, through collaboration on a global scale involving HR of overseas companies, we started to issue "Global HR Document," which clearly states our global HR philosophy, standards and guidelines on each HR-related topic. We have published ten key documents so far. In the future, we will make steady efforts to implement released documents at each Group company and also publish documents on new topics.



Activities of the Sumitomo Electric Monozukuri Development Committee Americas

Marty Todd
SEG Global Executive
President
Engineered Sintered Components

Sumitomo Electric Monozukuri Development Committee was set up in 2011 to promote collaboration between the US group companies across Business Units. I became the vice chairperson at the time of its establishment and remained in the post for three years. From 2018, I am involved to give advice in my capacity as an SEG Global Executive liaison. While its initial objective was to share good practices of the companies for the improvement of manufacturing capabilities, the committee has expanded its activities year by year and now helps enhance relationships between the Group companies and develop leaders for the next generation as well. The committee organizes training on fact-based root cause analysis, as well as annual kaizen (improvement) competition between Group companies in the US. Nowadays, it is committed to group activities involving shop floor level of the companies while also supporting the activities to introduce a new Manufacturing Fundamentals Assessment tool to identify their strengths and weaknesses in manufacturing activities and check the progress of their kaizen (improvement) activities.

I find the activities very rewarding and look forward to seeing what the committee can accomplish in the next 10 years.

Women's Empowerment

We strive for Women's empowerment with recognition that it is one of the driving forces to promote diversity

Sumitomo Electric regards Women's empowerment as one of the driving forces to promote diversity, and strives for it. We consider that the development of an environment where women can fully demonstrate their skills and keep playing important roles will also lead to the cultivation of culture that helps each employee work more actively. This is therefore a significant initiative for the future growth and development of our company.

《Response to the Act on Promotion of Women's Participation and Advancement in the Workplace》

In accordance with the Act on Promotion of Women's Participation and Advancement in the Workplace, we set targets on recruitment of women and appointment of women and formulated an action plan in April 2016.

We are currently promoting initiatives to meet the targets in the action plan for the 3rd phase.

● Results of the previous action plans

	Category	Targets	Results	Achievement
1st phase (note 1)	Recruitment	Women's share in the new graduates for main career track Clerical staff: 40% or more Technical staff: 15% or more	42.9% 15.4%	○ ○
	Appointment	Women's share in assistant managers or higher positions Section managers or higher positions: 1.5% or more Assistant managers: 10% or more	1.7% 10.3%	○ ○
2nd phase (note 1)	Recruitment	Women's share in the new graduates for main career track Clerical staff: 40% or more Technical staff: 15% or more	41.1% 17.7%	○ ○
	Appointment	Women's share in assistant managers or higher positions Section managers or higher positions: 2.0% or more Assistant managers: 13% or more	2.1% 10.6%	○ × (note 2)

(Note 1) 1st phase: from April 1, 2016 to March 31, 2018
2nd phase: from April 1, 2018 to March 31, 2020

(Note 2) Failed to achieve the target mainly due to an increase in male mid-career employees who became assistant managers

● Action plan for the 3rd phase

(1) Period

2 years from April 1, 2020 to March 31, 2022

(2) Targets

■ Targets on recruitment

Increase women's share in the new graduates for main career track (40% or more for clerical staff and 15% or more for technical staff)

■ Targets on appointment

Increase women's share in section managers or higher positions to 2.5% or more

Increase women's share in assistant managers to 10% or more

(3) Initiatives

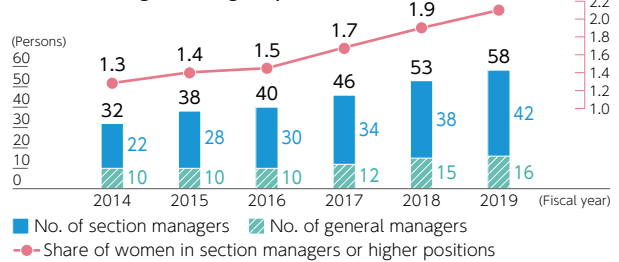
(Recruitment)

- PR activities mainly targeting female students
- Improvement of capabilities to recruit women

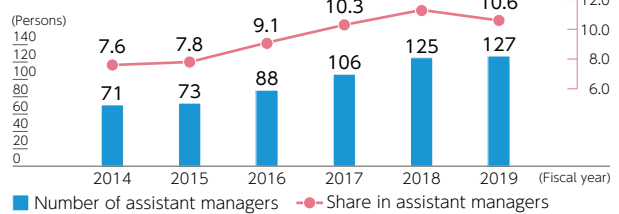
(Appointment)

- Implementation of measures to support female employees in their career development
- Monitoring of promotion of women in each division
- Organization of seminars to assist employees in the balance between child rearing and work
- Review of work styles according to challenges in each workplace

Number and share of women in section managers or higher positions



Number and Share of Women in Assistant Managers



(Note) Above graphs cover personnel data for Sumitomo Electric employees, including those on loan to Sumitomo Electric affiliates and other organizations.

Ratio of Male/Female Employees and Ratio of Male/Female Managers in Sumitomo Electric

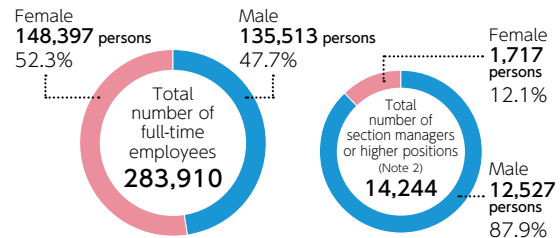
As of March 31 of 2020

	Male	Female	Total
Full-time employees	9,777 persons (85.8%)	1,616 persons (14.2%)	11,393 persons
Section managers or higher positions (Note 2)	2,718 persons (97.9%)	58 persons (2.1%)	2,776 persons

(Note 1) Above graphs cover data for Sumitomo Electric employees, including those on loan to Sumitomo Electric affiliates and other organizations.

(Note 2) Section managers or higher positions: section managers, division managers and management

Group employees in the world (Note 1)



(Note 1) Sumitomo Electric and its consolidated subsidiaries

(Note 2) Section managers or higher positions: section managers, division managers and management (including executive officers and other officers)

《Support of Career Development》

Women are more susceptible to life events and accordingly tend to have difficulty in imagining their career path. Therefore, we launched a training program for managers to understand the necessity and importance of developing female subordinates and consider suitable support for the growth of each of them in 2016. Furthermore, to help managers deepen the understanding and take specific actions, the training program is conducted in combination with "career dialogue training" from 2019.

Commitment to "SWING"

We will support women's empowerment through coordination on a group-wide scale

SWING stands for Sumitomo Electric Group Women's Innovative Networking Group, which was launched at the initiative of Sumitomo Electric, Sumitomo Wiring Systems, Ltd., Sumitomo Riko Company Limited and Nissin Electric Co., Ltd. in 2016. This group provides female employees of the Sumitomo Electric Group with opportunities for mutual study

and networking to cultivate female employees and improve their skills. In fiscal 2019, we held a forum for employees on general track at Tokyo Head Office (held for the first time, attended by 36 employees from 14 Group companies) and Chubu District Office (held for three consecutive years, attended by 58 employees from 14 Group companies), in which many employees had requested the forum to be held. With the theme of "Let's make yourself who can contribute to the team and show a talent!," the forum included a panel discussion by a representative from each of Sumitomo Electric, Sumitomo Wiring Systems, Ltd. and Sumitomo Riko Company Limited as well as a group discussion and group work. Such an exchange with female workers from other companies gave the participants an opportunity to consider what they can do for their teams and other issues.

Evaluation by External Organizations

《 Certification with "L-boshi" 》

We were certified as the top L-boshi company in August 2016. L-boshi is certification granted by the Ministry of Health, Labour and Welfare of Japan to companies that are outstanding in terms of encouraging women to play more active roles based on the Act of Promotion of Women's Participation and Advancement in the Workplace.

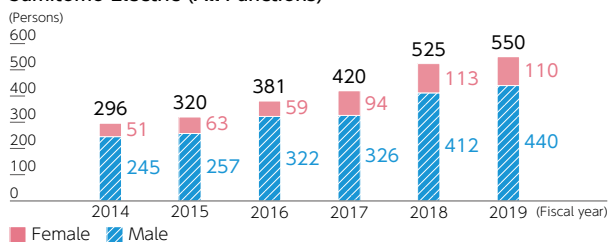


Diversity in Recruitment

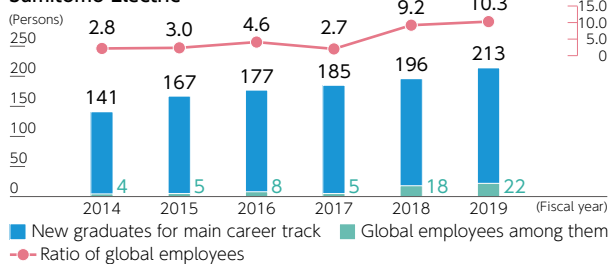
We aim to promote diversity through recruitment of a wide range of personnel

In fiscal 2019, Sumitomo Electric employed 213 new graduates for main career track in Japan, 53 of whom were female and 22 were non-Japanese and graduates from overseas universities ("global" employees). We also hired 167 mid-career employees. With the awareness of the need for diversification of human resources, we started to set a target percentage of global employees to the number of newly hired employees in the activities to recruit new graduates to be employed in fiscal 2017. This fiscal year, we are performing the activities to achieve the target of increasing the percentage to around 10%. We will continue to take various measures to ensure that diverse talents can demonstrate their capabilities regardless of nationality, race, gender, age or other background in the Group.

Number of Male/Female Employees Hired by Sumitomo Electric (All Functions)

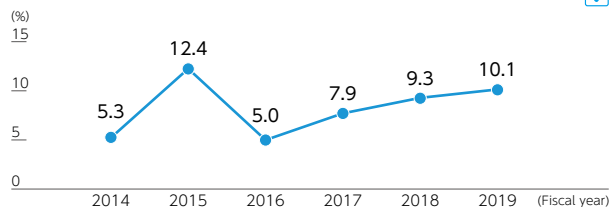


Ratio of Global Employees in the Employees Hired by Sumitomo Electric



(Note) Employees who were hired in months other than April are included.

Turnover Rate in Sumitomo Electric



(Note) Ratio of the number of the employees who were hired as new graduates three years before the relevant year and have left the company within three years to the total number of the new graduates hired three years before

Promotion of Employment of the Persons with Physical or Mental Disabilities

We are making steady efforts to help create a society where anyone can work vividly with or without their disabilities

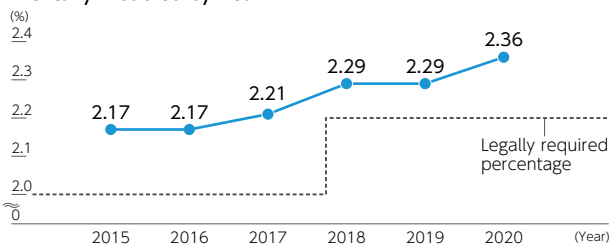
Sumitomo Electric has been traditionally working to promote employment of persons with physical disabilities. To further promote employment of persons with physical or mental disabilities and increase their employment rate, we established a special subsidiary*, Sumiden Friend, Ltd., on the premises of Sumitomo Electric's Itami Works, specifically for employment of persons with disabilities in July 2008 (certified in February 2009). Beginning with loan and maintenance of foliage plants, Sumiden Friend has expanded its operations gradually to also engage in the conversion of drawings and other paper documents into electronic files and shredding and recycling of waste paper. With the establishment of Nagoya branch in January 2020, 105 employees are working at the company, including 62 persons with disabilities, in the five bases including Yokohama, Tokyo and Osaka branches as of June 2020. As a result, the overall employment rate of the physically or mentally disabled for Sumitomo Electric and its qualified Group companies including Sumiden Friend (13 companies in total) was 2.36% in June 2020.

Number of Employees with Disabilities at Sumiden Friend as of June 15 of each year

	2015	2016	2017	2018	2019	2020
The disabled	33	39	45	54	56	62

(Persons)

Employment Rate of the Physically or Mentally Disabled by Year



(Note) Total for Sumitomo Electric and its qualified Group companies including Sumiden Friend, Ltd.

In our group, Sumitomo Wiring Systems, Ltd., Sumitomo Riko Company Limited and Nissin Electric Co., Ltd. have also established their special-purpose subsidiaries, which are SWS Smile Corporation, SumiRiko Joyful Company Limited and Nissin Heartful Friend Co., Ltd., respectively. An exchange meeting between these subsidiaries was held twice in 2019 to facilitate their coordination.

We will continue to develop a system to create places where persons with disabilities can work while feeling rewarded in many Group companies and worksites and to ensure that all Group companies will achieve and maintain the legally required percentage in response to legal revisions and other changes.

Glossary

*Special-purpose subsidiary

The subsidiary is established by a company for the purpose of hiring persons with disabilities under the Law for Employment Promotion etc. of the Disabled. Permission from the national government is required for the establishment. Persons with disabilities employed by a special-purpose subsidiary can be considered to be the parent company's (or corporate group's) employees when the percentage of the employment rate of persons with disabilities is calculated.

Safe and Sound Workplace

Work Style Reforms

Sumitomo Electric promotes company-wide campaigns with the aim of ensuring that employees can achieve the proper balance between work and life in order to create a workplace that allows diverse staff to work comfortably

We have conducted various initiatives for work style reforms since 2008, including the promotion of work styles that balance work and life and the review of the operations of each division to improve the efficiency. At present, we conduct both company-wide and division-specific initiatives to review work styles and thereby reduce total annual working hours, encourage employees to take paid holidays and improve work efficiency and productivity.

In April 2020, we plan to introduce a "work-interval system," which aims to ensure that employees have a sufficient amount of rest from the finish time of a day to the start time of the following business day, on a trial basis. Through this initiative, we will strive to maintain the health of employees and also sustain and further improve productivity.

We are taking measures in response to the issues of individual workplaces and persons identified based on findings in the Survey to Create a Lively Working Environment, a questionnaire survey to investigate the awareness of employees, with an aim to make the workplaces more attractive.

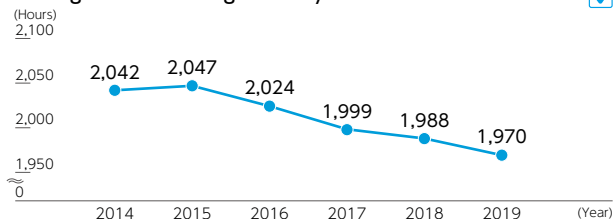
We now conduct initiatives from various perspectives including efforts to change the corporate culture and awareness, as well as enhancement of productivity through the use of infrastructure and IT tools and the review of work rules and processes. We will continue to review the work styles, which will not only reduce working hours but also contribute to the maintenance and improvement of business performance, for the growth of our business.

Average Overtime Hours and Average Number of Paid Holidays Taken by Employees by Year

Year	2014	2015	2016	2017	2018	2019
Average overtime hours per month	20.4 hours	20.8 hours	20.2 hours	19.3 hours	18.7 hours	17.5 hours
Average number of paid holidays taken by employees per year	12.1 days	12.1 days	14.1 days	16.0 days	16.5 days	16.9 days

(Note) Average among labor union members of Sumitomo Electric from January to December in each year

Average Total Working Hours by Year



(Note) Average of the total working hours in each year from January to December of each of the Sumitomo Electric employees (including those on loan to Sumitomo Electric affiliates and other organizations within the Works)

Implementation of the Survey to Create a Lively Working Environment

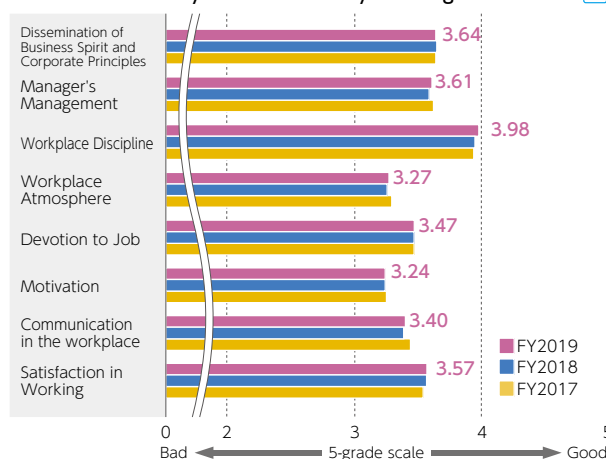
We have added questions about progress in the dissemination of the mid-term management plan, as well as questions about harassment, for the understanding of the current situation of each workplace

Sumitomo Electric has been conducting Survey to Create a Lively Working Environment, a questionnaire survey to investigate the awareness of employees, since fiscal 2006. In fiscal 2019 as well, about 20,000 employees of Sumitomo

Electric and Group companies were surveyed.

The content of the survey is reviewed every year. While the results for most of the items checked for the change over time showed improvement, there were still issues to be addressed in some areas including "Career Development" and we have designed and implemented personnel measures or training to respond to them. In addition, we started to analyze the correlation between the survey results and the results of the stress check, which measures the stress level of individuals, in fiscal 2018. The overall results are fed back directly to the responsible person in each organization to encourage each workplace to consider specific measures against the issues and to use the results for the establishment of workplaces where people can work in a healthy and energetic manner.

Results of the Survey to Create a Lively Working Environment



Support for Balancing Work and Life

We actively promote the development of child and family-care related systems

To support employees in balancing work and life, Sumitomo Electric is committed to promoting the work style that achieves the proper balance between work and life and has also developed child and family-care related systems actively. For these efforts, the Company has been certified by the Ministry of Health, Labor and Welfare as a company that helps its employees balance work and childcare based on the Act on Advancement of Measures to Support Raising Next-Generation Children. In fiscal 2018, we newly allowed employees to use the work from home arrangements for other purposes than child rearing and nursing care and also introduced a system of paid holidays that can be taken by the hour so that employees can work in a more flexible manner. We also use training sessions and in-house magazines on nursing care to give relevant information and encourage them to prepare for the achievement of a balance between nursing care and work. Through these measures, we are working to help employees balance work and life now and in the future.



Special certification mark "Platinum Kurumin" *

Various Types of Support

We support the life of each employee in various aspects

《Reemployment System》

In April 2008, Sumitomo Electric introduced a scheme to reemploy employees resigning due to circumstances beyond their control such as childbirth, childcare and nursing care. In the scheme, we organize interviews and reemploy eligible

persons when they are able to return to work (within three years or, for those who moved overseas, five years from their resignation) and, as a general rule, assign them to their former workplaces.

《 System to take a leave to accompany his/her spouse who is assigned overseas 》

In April 2017, we introduced a system in which an employee can take a leave of absence to accompany his/her spouse who is assigned overseas and return to work after the leave. This system allows temporary retirement in such a situation with the aim of preventing employees from retiring.

《 Childcare Centers 》

As a measure to foster a supportive environment for employees working full-time while raising children, Sumitomo Electric opened childcare centers at its Yokohama and Osaka Works in March and April 2008 respectively and Itami Works in March 2009. In 2018, a new childcare center was established in the neighborhood of our Tokyo Head Office. As of March 31, 2020, these centers take care of 56 children in total.

In addition, for employees who cannot use our childcare centers, we are taking other supportive measures such as subsidizing their use of other childcare centers.

《 Hokatsu Concierge System 》

In the activities to find childcare facilities to take care of children ("hokatsu" in Japanese), various kinds of know-how are needed because the approach and schedule of such activities depend on the childcare environment in the place of residence and the month of birth of the children. This Hokatsu Concierge system, which was started in November 2014, aims to help employees during childcare leave return to work smoothly at the time she hopes to return. Know-how on hokatsu depending on the circumstances of individual employees, as well as information on childcare facilities, is provided in this system.

《 Work from Home Arrangements 》

We introduced work from home arrangements, which allows employees who face restrictions on their work due to childcare, nursing care, etc. to work at home or other locations in fiscal 2016. On October 16, 2018, we started to allow other employees who meet specific requirements, such as abilities to autonomously fulfill duties and make achievements, to use the system. The purposes of the expansion of the system include the realization of flexible and efficient work styles and the improvement of productivity through the review of work

styles. We will continue to work to enhance the flexibility of working styles and develop an environment where diverse human resources can play more active roles.

《 Volunteer Holiday System 》

Employees can take up to 10 holidays in a year to engage in volunteer activities approved by the Company. This system is used for various social contribution activities such as coaching of local children in sports activities and accompanying of children on trips for residential training and games.

《 Childbirth and Rearing Support Program 》

For female workers during pregnancy and parenting, it is especially important to have dialogue with their superiors in a detailed manner.

In fiscal 2015, we introduced a system to organize dialogue between such an employee and her superior when she is found pregnant, one month before maternity leave, before return to work from childcare leave and two months after return to work from childcare leave, to help her return to work smoothly and work actively after the return from childcare leave. In fiscal 2019, the system was revised to also organize such dialogue six months after the return from childcare leave to encourage dialogue with focus on her career path.

《 International Employees Support Project 》

To create a work environment where international employees can work comfortably, we set up a project team in the HR Division in 2017. The team has taken various measures to support them, including the establishment of a support desk where staff can give support in Japanese, English and Chinese, development of bilingual systems (Japanese and English) for time & attendance management, business trip transportation expenses and other items, issuance of pay slips and internal regulations in English, creation of prayer rooms in Osaka Head Office and Osaka Works and training sessions to become familiar to the business culture in Japan.

《 Response to the COVID-19 pandemic 》

While encouraging employees to make active use of teleworking, flex work and staggered working hours systems, we offered skill development programs that can be learned at home (such as e-learning) and took other initiatives including provision of special (temporary) leave to address the temporary closure of elementary schools, etc. and temporary suspension of business in consideration of infection control measures and the situation of operation.



Development of a work environment where employees of diverse nationalities, religions and cultures are understood and respected

Wong Tsz Yu
HR Group, Osaka Works

I joined Sumitomo Electric as a new graduate recruited overseas in April 2018 and was assigned to HR Group of Osaka Works in July of the same year. While my current main job is to support the divisions, I am in charge of wide-ranging tasks in training and other personnel-related areas.

Although I felt anxious about working in Japanese initially after joining the company, I took an internal training program to learn Japanese and also learned reporting and presentation skills in the program, which have helped me work effectively. In response to ongoing globalization within the company, personnel initiatives to address it, such as the launch of the international employee support project, have been promoted.

In addition to the recruitment of international employees like me, Sumitomo Electric actively accepts interns from overseas universities. When interns were accepted in Osaka Works, prayer rooms were created and the halal menu was introduced at the cafeterias out of consideration for their religions. The halal is offered at reasonable prices as with other food. The international interns who ate halal were very pleased. I am so glad for the expansion of such support and, as a personnel staff member, would like to improve the environment and personnel systems to ensure that people can play an active role irrespective of nationality, religion or values.



Prayer room

Sumitomo Electric Group Health Management Declaration

We are working to realize "health and productivity management"

We consider that the Sumitomo Electric Group cannot achieve sustainable development or growth without the health of each employee. We announced the Sumitomo Electric Group Health Management Declaration in 2015. Based on the declaration, we launched activities in 2017 under the title of "Kenkatsu!,"* with focus on the prevention and improvement of metabolic syndrome, development of exercise habits and mental healthcare, and now continue to develop the activities.

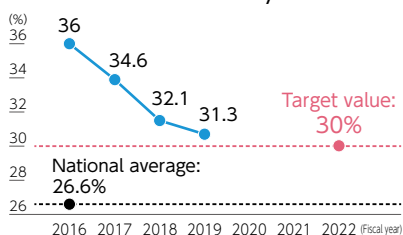
《 Initiatives to Prevent and Improve Metabolic Syndrome 》

In Sumitomo Electric, the percentage of employees who have metabolic syndrome was 36%, which was higher than the national average, when the initiatives were introduced in 2017. Since then, we have worked for the prevention and improvement of metabolic syndrome while also using the knowledge owned by industrial physicians and health nurses to improve the lifestyle of employees.

Improvement of the lifestyle	Lifestyle improvement incentive program Program to give incentives according to the level of achievement of the targets set on several items including daily exercise, dietary life and drinking: Joined by 2,400 persons
Enhancement of special health guidance	3-month intensive lifestyle improvement program by health nurses of Sumitomo Electric and sports trainers: Joined by 140 persons • The participants reduced their weight by 5.6 kg, abdominal girth by 5.5 cm and body fat by 3.7% on average
Measures to prevent passive smoking	Ban on smoking during office hours (to be enforced by the end of fiscal 2021) and start of a program to subsidize costs for treatment to quit smoking

We also organized seminars on the prevention of cancers, dietary life, exercise habits and other subjects. As a result of our efforts to enhance the awareness of health through the initiatives for all employees, the percentage of employees who have metabolic syndrome has declined to 31.3%.

Percentage of employees aged 40 or over who have metabolic syndrome



《 Contribution to Sports Activities 》

We are committed to the development of exercise habits and encouragement of communication through sports, along with local contribution mainly through track and field sports.

Sports lessons	Athletic exchange meeting by Sumitomo Electric Track and Field Team and former team members • Athletic exchange meeting: Joined by 107 persons including employees, their families and local people • Athletic lessons for elementary school and junior high school students in Itami City (held 17 times in total): Joined by 3,093 persons
Internal sports events	SEI Challenge Cup (relay marathon, tennis, etc.): Joined by 1,200 employees Walking event: Joined by about 2,400 persons

In addition, we have developed welfare programs such as subsidy for costs on fitness gyms. We thus support the establishment of an environment to encourage 2,500 employees and their families to engage in sports on a daily basis.



《 Mental Healthcare 》

We provide "self-care" training as well as "care by supervisor" training mainly for management-level employees in workplaces with high stress. Also, we continue to implement the working environment improvement activities based on the results of stress level tests, which were launched in fiscal 2018, to create a more comfortable workplace.

《 External Assessment 》

● Selection as a 2020 Health and Productivity Stock:

Sumitomo Electric was selected as a Health and Productivity Stock by the Ministry of Economy, Trade and Industry of Japan and Nippon Kenko Kaigi in March 2020.

● Recognition as a Sports Yell Company:

We were recognized as a Sports Yell Company by the Japan Sports Agency in December 2019.



Labor-Management Relationship

The union and management are committed to solving various problems through in-depth discussions

Sumitomo Electric believes that the development of a company goes hand-in-hand with the well-being of its workers' union members. On the basis of this belief, Sumitomo Electric strives to address various relevant issues by thorough discussion between the union and management, each party respecting the other's standpoint. In particular, the Central Management Council Meeting, which is held four times a year, has a history of about 70 years, and has served as a forum for exchange of opinions between representatives of the union and management concerning business environments and managing conditions. While working styles are increasingly diversified, we have also set up expert committees of various kinds to create an environment where all employees can work lively with smiles by improving various working systems and reinforcing monitoring functions.

Organization of Town Meetings

We provide employees with opportunities to have direct dialogue with executives and make use of their opinions to facilitate various initiatives

To enhance communication inside the Company, we organize town meetings at each of our sites, in which a group of employees from different sections directly and openly talk with board members, general managers or other executives. The participants have precious opportunities to inform the executives of problems and requests concerning human resource development, promotion of diversity and work style reforms, as well as those specific to their functions, and share such problems to seek clues and solve them. Specifically, we organized position-based town meetings, as well as town meetings for international employees and mid-career workers, in fiscal 2019. The opinions and other comments presented in the meetings are communicated to the relevant divisions on a timely basis and used for organizational operation, planning of personnel systems and other purposes, as well as for the facilitation of the initiative.

Glossary * Kenkatsu!

A coined term used in Sumitomo Electric to collectively refer to health maintenance and improvement activities promoted in companies and worksites and by individuals to extend healthy life expectancy and develop a sense of unity in worksites. The three key activities are "prevention and improvement of metabolic syndrome," "promotion of sports and improvement of exercise habits" and "mental healthcare."

Human Resources Development

Personnel Needed by Sumitomo Electric

Personnel needed by Sumitomo Electric are defined as those who honor the Sumitomo Spirit, understand the Sumitomo Electric Group Corporate Principles, possess high levels of skill and knowledge rooted firmly in the basics, and who can play active roles in the global community. We provide various training programs to support employees in becoming such personnel based on the concepts of the "individual employees' strong motivation for self-development" and "on-the-job coaching and close communication between superiors and subordinates."

SEI University

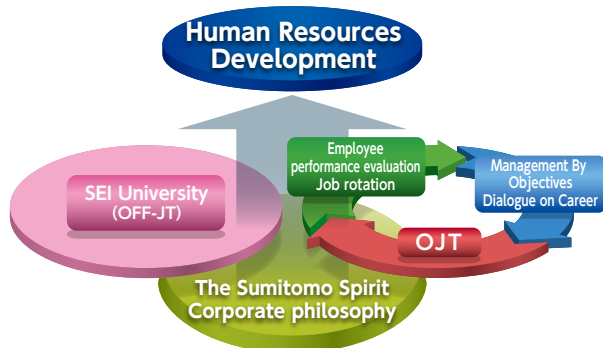
We work to improve the value of human resources throughout the Group

SEI University represents the Sumitomo Electric Group's comprehensive training and education system. With the aims of achieving corporate targets and becoming a Glorious Excellent Company, we provide various training programs in a wide range of areas at SEI University.

Fundamental Principles of SEI University

SEI University will serve as a venue for:

- ① Disseminating the Sumitomo Electric Group's corporate philosophy,
- ② Sharing the Sumitomo Electric Group's management strategies and vision, and
- ③ Developing employees' abilities, skills and knowledge so that they may play active roles in the global community.



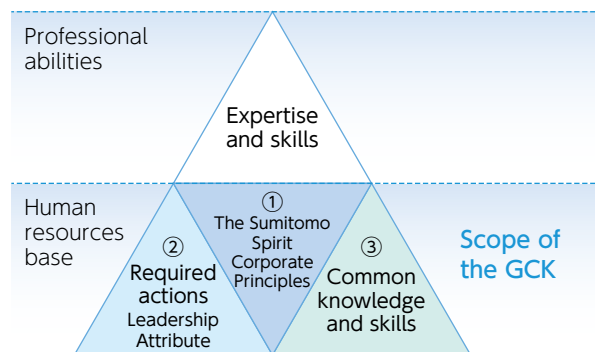
SEI University provides more than 300 training programs (commonly developed across the Group), including position-based compulsory programs for all group employees ranging from executives to new employees, in the three areas of human skills, problem-solving skills and technical skills. Our Group companies and divisions also organize their original training programs in the field of technical skills to have the trainees acquire the unique knowledge and skills especially required in the respective workplaces. In particular, the Sumitomo Spirit is positioned as the basis for employees to perform their duties. We give them opportunities to learn about it in the training programs for new employees and various position-based training programs. In addition, we always explain the relations of the Sumitomo Spirit to compliance and human rights in the relevant training programs. Furthermore, the president asks all employees to perform their duties in accordance with the Sumitomo Spirit via a video once in six months and the video is also translated into multiple languages and distributed to Group companies in

Japan and overseas. For the employees to be assigned overseas, a preliminary training program to ensure that they can convey the Sumitomo Spirit in their own words in their new workplaces is organized before the transfer. We are also cultivating internal lecturers to enable the Sumitomo Spirit to be learned periodically in Group companies in Japan and abroad.

《Global Common Knowledge (GCK) Project》

In the rapidly changing business environment, while it is getting increasingly important to improve the competence of employees, the items to be thoroughly learned by employees for the strengthening of corporate governance have been diversified. In this context, it was necessary to organize and integrate the training programs and know-how that have been cultivated since the establishment of the SEI University to clarify the content that should be thoroughly learned on a global scale. It was also important to show a foothold for our Group companies in Japan and overseas to improve their understanding of the training programs to be introduced in response to their respective situations and challenges more than ever and prioritize the programs. With this recognition, we took an overview of the training programs provided in the past and reorganized and systematically presented the items to be learned by employees in accordance with their positions as Global Common Knowledge (GCK) in fiscal 2019. From fiscal 2020, toward the final fiscal year of VISION 2022, Sumitomo Electric will develop content based on the GCK and provide them worldwide. Group companies will be committed to human resource development while also using external programs suitable for the companies and countries/regions. At the same time, we aim to ensure that the GCK supports each of the employees as a guide for personal enlightenment.

Concept of the Global Common Knowledge (GCK)



Training categories of the SEI University

	Basic	Practical		
		Human skills	Problem-solving skills	Technical skills
Managers	Corporate Principles Action principles	Management	Business management Innovation	Manufacturing
Staff	Compliance Safety and the environment	Human skills	Problem-solving	Business
	Banji-nissei Shinyo-kakujitsu Fusu-furi Mutual Prosperity, Respect for the Public Good	Respect for human resources	Long-range planning	Attaching importance to technology

Record of the training sessions organized across the Sumitomo Electric Group in FY2019

Applicable employees	Total number of participants (persons)	Total length of training (hours)
Sumitomo Electric employees	56,066	400,491
Employees of Group companies in Japan	21,406	91,047
Employees of overseas Group companies	14,081	63,560
Total	91,553	555,098

Record of unique training sessions organized in individual Group companies in FY2019

Applicable employees	Total number of participants (persons)	Total length of training (hours)
Domestic Group companies (22 companies)	32,901	171,665
Overseas Group companies (88 companies)	192,798	573,768
Total	225,699	745,433

Promotion of Dialogue on Career

We help employees consider their career and be committed to their growth

For employees to grow, they have to design their career visions based on their own values and ways of life and strive to realize them. They can improve their abilities by actively engaging in self-development and using the abilities developed through on-the-job training to do more challenging jobs. Sumitomo Electric, which aims to establish a win-win relationship where the improvement of necessary skills by the employees through their jobs also results in the growth and development of the company, supports employees for the purpose.

We have conventionally operated a system that has superiors have dialogue with their subordinates to support their career development when annual business targets are set, and also continue to organize training that helps understand the importance of the dialogue and specific methods to promote it. In the training session for superiors, they learn (1) the necessity of dialogue on career and (2) specific methods to promote dialogue, as basic knowledge. After understanding the importance of motivating subordinates to work and attaching meanings to their jobs in (1) and learning the development of an atmosphere for dialogue, attentive listening for receiving empathy and how to ask questions in (2), the superiors deepen their understanding by watching a video of real interviews and exchanging opinions on good and bad points in the video with each other. We also provide them with opportunities to exchange information on the problems they individually face so that they acquire skills and knowledge that can be used in dialogue with subordinates.

For subordinates, we offer training sessions and tools to consider their career while encouraging them to share the career they envisage with the superiors through the dialogue. We also provide training to newly promoted management staff and employees who have reached the age of 45 or 50 to prompt them to reflect on their own careers and examine what are their strengths, what in the job was interesting for them and why. The participants also consider their future career through group discussions in the training.

Addressing Globalization across the Group

We develop training activities globally across the Group

① Development in Group companies in Japan

To promote human resources development across the Sumitomo Electric Group, we provide employees of our Group

companies in Japan with opportunities to attend training sessions organized by Sumitomo Electric. The number of the participants from our Group companies in Japan in the training for new employees, mid-career employees and newly promoted personnel is increasing year by year.

When it is difficult for a Group company to run training programs, internal lecturers are delegated from Sumitomo Electric to provide necessary training and other services.

② Development on a global scale

To promote the development of human resources that meet local demand, HR manager meetings are held regularly on a country basis to discuss the planning and operation of various training programs with focus on those for general employees. In addition, persons in charge of HR development in our Group companies across the world are invited to Japan once a year to hold the Global Human Resources Development Meeting and discuss the development system commonly applied on a global scale.

We also organize the following training programs for management personnel commonly in Japan and overseas.

Target: Executives

Executive training program

Executives are developed through action learning as well as understanding of the Sumitomo Spirit and acquisition of management knowledge. This training program is held once a year and attended by about 50 persons each time.

Target: General Managers

Global Leadership Development Program (GLP)

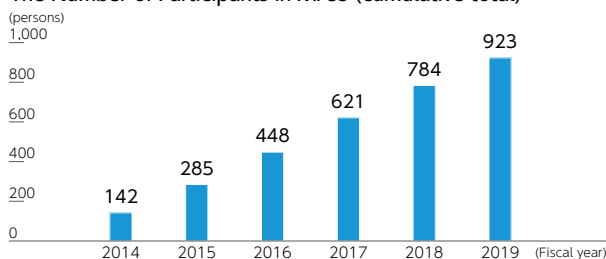
Human resources that can show leadership on a global scale are cultivated through discourses of executives, leadership workshops and understanding of the Sumitomo Spirit. The program was held twice a year until 2015 and is held once a year from 2016. Each session receives about 30 participants.

Target: Managers

SEG Management Program based on the Sumitomo Spirit (MPSS)

This program aims to diffuse the Sumitomo Spirit and improve skills to manage subordinates. The sessions are provided in six cities in Germany, the United States, Singapore, China (Shanghai and Shenzhen) and Mexico and a total of approximately 150 persons attend the common program in those locations in a year.

The Number of Participants in MPSS (cumulative total)



③ Response to globalization in the Company

In line with progress in the globalization of our business activities, international employees working in Japan are also increasing year by year. To develop an environment where all employees can play an active role beyond differences in language, culture or value, we enhance our Japanese language training program for international employees and

provide them with training on the business culture in Japan as part of the project to support them. We also give training for workplaces to ensure that those who receive international employees can properly understand the issues to be noted.



I attended the executive training program

Scott Parker
President and CEO
Sumitomo Electric Device Innovations,
U.S.A., Inc.



I participated in the executive training program for fiscal 2019 and it was one of the highlights in my career as an executive.

In the activities for action learning, which was part of the training program, I formed a small team with participants from other Business Units and cooperated to develop a business plan on the given subject. Later, we had an opportunity to propose the plan to top management including the chairman and the president of Sumitomo Electric.

Our team had discussions to develop the plan every week for six months. In the intermediate reporting session for managing executive officers of Sumitomo Electric, we received very useful instructions for the final presentation. Since our team was composed of American and Japanese members, I learned how to complete a project beyond differences in culture, language and time zone.

At the same time, I spent a lot of happy time with other members and made good friends from different divisions. In the training, I also learned the long history of Sumitomo along with the business spirit cultivated by it.

It was a particularly precious opportunity to visit and directly see the Besshi copper mine. The history of the business reform of the Besshi copper mine and restoration of it by planting trees demonstrated the competence of Sumitomo, which has completed large-scale projects through concentration of resources on them, as well as the fact that Sumitomo has been committed to the development of the local communities where it conducts business throughout its long history.

In the special lecture organized in a temple in Kyoto, I learned the values underlying the Sumitomo Spirit such as "Shinyo-kakujitsu," "Fusu-furi" and "Mutual Prosperity, Respect for the Public Good" more deeply.

I thank Sumitomo Electric for making a vast investment for my growth as a manager.

Cultivation of Manufacturing Personnel

Based on the basic concept that "manufacturing is human resources development," we promote cultivation of manufacturing personnel through the three main initiatives of ① basic training on manufacturing, ② practical training and ③ small group activities

The underlying concept of the basic training on manufacturing is to learn with actual machines and products. Subjects in the curriculum are wide-ranging from SEQCDD, which are essential for manufacturing, to the Group's proprietary technologies and techniques and the latest technologies including equipment

control and maintenance technologies. The curriculum of the training program for new employees is enhanced continuously by incorporating advanced technologies as well. The number of participants is also growing every year. Overseas as well, we regularly provide training on basic knowledge and the maintenance of equipment in China and Southeast Asia. The practical professional training is given in programs that aim to cultivate key personnel who are anticipated to drive manufacturing innovation and reinforce the SEQCDD competitiveness. Important challenges of the respective divisions are selected as the themes, and trainees are assigned to the divisions of their themes to perform practical activities for the solution of the challenges and problems. The small group activities (called "SGA") are developed and promoted on a global scale to solve problems and achieve objectives voluntarily on a workplace basis with the aims of developing human resources, energizing the workplace and helping improve the performance. Among these three key activities, we placed particular emphasis on the following initiatives in fiscal 2019.

《 Program to develop plant managers 》

This program aims to develop "strong" plant managers (equivalent to the manager of a manufacturing section) who will play a pivotal role in manufacturing. In the program, assistant plant managers learn the concepts and knowledge essential for plant managers in a six-day training course and then have an opportunity to deepen their understanding through practical operations. In the meantime, to create "strong" plants, those who are appointed as plant managers participate in a two-day training course and a designated workshop that is held once in three months. We plan to develop 20 to 30 plant managers or so every year through this program and also use it to cultivate general managers of overseas manufacturing divisions in the future.



Program to develop plant managers



Improvement of the potential power of the plant

Yasuhiko Ura
Manager of Hybrid Plant, Manufacturing Department
Hybrid Products Division

I participated in assistant plant manager training and plant manager training, and also attended a plant manager workshop three times. In the training, I acquired knowledge for plant managers and had an exchange with other plant managers. Meanwhile, I feel that these workshops allowed me to learn new ways of thinking and seeing things and expand my horizon as a plant manager through the inspection of other plants.

My plant is committed to 3 points control of quality to make it stronger, namely change point control, abnormality control and standards compliance control. In fiscal 2020, we will review our approach for strengthening management by reference to the methods implemented in other plants to enable our plant to produce outcomes. These activities are expected to reduce the waste and defective goods generated in the plant, as well as energy consumption.

We will promote the reduction of environmental impact through efforts to make the plant stronger.

To Be the Safest Company in the World

Basic Approaches

The Sumitomo Electric Group considers that securing of health and safety of employees is the basis of the business. We promote the establishment of culture to prioritize safety above all else and continuously perform safety and health activities involving all employees to eliminate risk factors from our workplaces with the aim of becoming the world's safest company. Specifically, having formulated "Safety Philosophy," "Principles of Safety Activities" and "Occupational Safety & Health Guidelines," we specify priority activities and subjects for each fiscal year to meet the targets at the Health and Safety Committee, which is composed of members from management and the union.

Safety Philosophy

- Safety is our top priority.
- All accidents can be prevented.

Principles of Safety Activities

1. Top managements of business sites and organizations shall act to lead by example of themselves in improvement of the safety culture.
2. Mutually enlighten safety consciousness through bidirectional communication.
3. All members shall act to aim a global top safe enterprise.

Occupational Safety & Health Guidelines

We, Sumitomo Electric Group, raise "Safety is our top priority" in group wide, and, aim comfortable workplaces able to work in safe and ease, by belief of top management and efforts of individuals in the group, under the basic spirit of "Respect for Humanity".

We establish and enforce following guidelines, and actively endeavor to improve the occupational safety and health.

1. By eliminating every hazardous and harmful elements from the workplace, aim to be a top enterprise of "Zero Accidents, Zero Dangers".
2. Comply company rules, as well as, legal regulations and other safety requirements.
3. By conducting safety & health education and training, enhance the sensitivity and knowledge.
4. Achieve work environment able to work comfortably in health in both mental and physical aspects.

Fostering Safety Culture

Safety Philosophy and Principles of Safety Activities have been formulated to foster the culture of safety

In fiscal 2019, we established Safety Philosophy and Principles of Safety Activities to clearly define the rules that have conventionally been followed as unwritten rules. We now promote activities based on them.

The first item of Principles of Safety Activities stipulates that executives in a position equivalent to or higher than a general manager or the president of an affiliate declare action targets as "safety actions of top management" and demonstrate the actions to develop the safety mind of employees. This initiative was launched this fiscal year.

The second item mentions that all plant managers acquire skills for dialogue-based safety patrol in group training and practice dialogue with workers on a daily basis to eradicate unsafe action of workers and share and improve difficult operations that can cause unsafe actions.

The third item intends to activate the S-T-O-P accident campaign* and other initiatives involving all employees. In the future, we will design activities involving all employees in accordance with the characteristics of each division and aims to be the safest company in the world.

Safety Measures in Facilities

《Safety! Power OFF Activity》

In the "Power OFF Activity," we identify the risks of directly touching or approaching any rotating or moving parts and then promote equipment safety measures (hardware-related measures) to address them. We manage the identified risks based on a company-wide registration system in domestic sites to establish hardware-related measures against them and have implemented such measures for about 1,500 operations as of the end of March 2020. For problems that cannot be solved with existing techniques/solutions/methods/strategies and require the development of new ones, the division in charge will work with the Manufacturing Management & Engineering Unit to be committed to completing them.

《Prevention of serious accidents involving forklifts》

We are promoting the enhancement of measures to separate forklifts from people to prevent serious accidents.

Targets and Results in Fiscal 2019

	Targets for FY2019	Results in FY2019
Safety VISION 2022 ① Safety measures in facilities ② Development of human resources with high safety awareness ③ Fostering safety culture	<ul style="list-style-type: none"> ● Action items for FY2019 <ol style="list-style-type: none"> ①-1 Acceleration and completion of hardware-related measures ①-2 Safety measures for forklifts and cranes ②-1 Development of awareness training using CG to reproduce disasters ②-2 Start of repetitive training for technical staff ③-1 Promotion of commitment of general managers and higher positions ③-2 Training for dialogue-based inspections: All plant managers → Practice ● Activities to be conducted continuously with the participation of all employees <ul style="list-style-type: none"> • Recognition of problems by top management • S-T-O-P accident campaign • Activities to comply with rules and standards ● Group-wide structural reinforcement activities <ul style="list-style-type: none"> • Emergency safety management and priority safety management activities • Plant disaster prevention • Global safety diagnosis • Strengthening of group-wide sharing of best practices 	<ul style="list-style-type: none"> ● Action items for FY2019 <ol style="list-style-type: none"> ① Identification of the risks of directly touching or approaching any rotating or moving parts → Implementation of hardware-related measures: Completed 1,458 items (68%) ① Promotion of the separation of vehicles from people ② Enhancement of discussion-based training using CG to reproduce disasters ② Full-scale implementation of repetitive training: Provided the training to 762 persons (94% of the employees who need to receive it) ③ Promotion of the commitment of general managers and higher positions ③ Dialogue-based inspections: Conducted for all plant managers ● Activities to be conducted continuously with the participation of all employees <ul style="list-style-type: none"> • Full-scale development of the S-T-O-P accident campaign (4 Works and Osaka and Tokyo Head Offices) ● Group-wide structural reinforcement activities <ul style="list-style-type: none"> • Emergency safety management and priority safety management activities: Continuous implementation • Plant disaster prevention: Continuous supervision of construction work • Global safety diagnosis: Started the third round • Strengthening of group-wide sharing of best practices: Started the consideration of TRAP* analysis

Glossary

* S-T-O-P Accident Campaign

This slogan represents basic rules to be followed while walking. S: Do not take a short cut and watch your step; T: Do not text or talk on the phone while walking; O: Hold on to the handrails when using stairs; and P: Do not put your hands in your pocket while walking

* TRAP analysis

TRAP is an abbreviation of Trap Avoiding Program (a phrase coined by Sumitomo Electric). TRAP analysis aims to prevent the occurrence and recurrence of work-related accidents based on the theory of failure studies. "I thought that I was taking the right action but it caused an unfavorable result against my will (due to an unexpected trap). I will identify the trap and consider it for prevention in the future."

In fiscal 2019, we prepared guidelines that specify the standards to be applied across the company and raised the target in Safety Vision 2022 from "simple separation" to "separation with fixed fences and temporal separation" to strengthen the activities in our sites in Japan and overseas. We are also promoting improvement measures from the perspective of manufacturing such as replacement of forklifts with other transportation equipment, changes in the flow of people and goods and shortening of transportation distance.

Development of Human Resources with High Safety Awareness

Protect your life by yourself

While the number of accidents related to facilities is on the decrease, the number of accidents attributable to human error or management remains unchanged at a high level. As an initiative to improve the attitude toward safety, which is one of the causal factors of accidents, we have reviewed the training program (Development of human resources with high safety awareness) since fiscal 2017.

《 One-way education based on lectures ⇒ dialogue-based education to appeal to sensitivity and enhance motivation and awareness 》

1. Listening directly to those affected by accidents (to learn their remorse, hard feelings and physical and mental pains directly)
2. Dialogue-based education to experience danger (to not only experience the fear but also identify your own experience with the actual accidents)
3. CG to reproduce disasters + discussion and presentation (to consider the causes of the accidents and how they could have been prevented)

《 Repetitive training for those who have few opportunities to receive education 》

1. Repetitive training for technical staff provided every three years (participation in safety training)
2. Safety training for 3rd-year employees using content extracted from the curriculum of KKP*, the practice of theme-based activities and organization of a report meeting

In fiscal 2019, the repetitive training was launched on a full scale and given to 762 persons.



Discussion in repetitive training

Safety Performance and Future Actions

In fiscal 2019, the number of accidents involving injury increased slightly from fiscal 2018

During fiscal 2019, we had a total of 72 accidents, which were broken down into 8 injuries resulting in lost work time, 41 no lost work time injuries and 23 minor injuries (including employees of the Sumitomo Wiring Systems Group) and the accident score was 307. Thus, while we set a target of zero serious accidents and accidents causing minor injury, and an accident score of 212 and met the target of zero serious accidents, we failed to meet the targets for the number of accidents including accidents resulting in remaining disabilities, as well as the target accident score.

Analysis of the accidents by situation shows a downward trend in walking and falling accidents. We consider that the improvement is attributable to changes in the awareness of falls among employees through the S-T-O-P accident campaign.

On the other hand, other accidents, especially accidents attributed to causes that can result in a serious accident, did not decrease. In addition, forklift-related accidents occurred although they had not occurred in recent years. Thus, the measures we have recently taken as priority activities did not produce results.

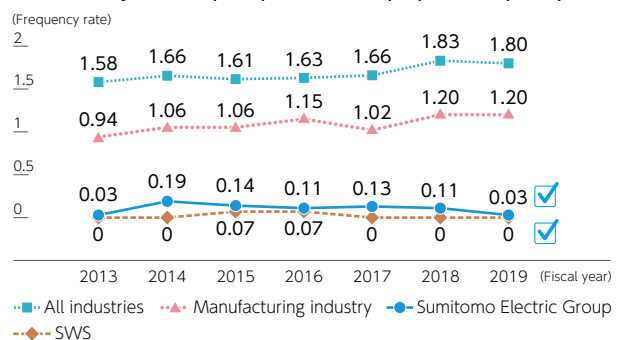
In fiscal 2020, we are making efforts to achieve a target of zero serious accidents and accidents resulting in remaining disabilities, 47 or less accidents resulting in lost work time, no lost work time accidents or accidents causing minor injury, and an accident score of 210 or less in the Sumitomo Electric Group (including the employees of the Sumitomo Wiring Systems Group) as part of our commitment to "becoming a company with the highest level of safety in the world." Specifically, we will 1) implement safety measures in facilities, 2) develop human resources with high safety awareness and 3) foster a culture of safety, which are the core initiatives of Safety VISION 2022. We will particularly take measures to eradicate the three major accidents that can directly result in serious accidents, namely the accidents involving "rotating parts and moving parts," "forklifts" and "cranes and heavy objects." Moreover, we will share safety information with the three companies of Sumitomo Riko, SUMITOMO DENSETSU and Nissin Electric to create workplaces where people can work more safely with a sense of security and improve the safety level of our Group as a whole including listed companies. (Number of injuries resulting in lost work time in fiscal 2019 including those in the three companies: 28)

Accidents involving injuries

		Sumitomo Electric Group			SWS Group		Total
		Employees		Temporary worker, subcontractor	Employees		
		Japan	Overseas		Japan	Overseas	
FY 2019	Accidents resulting in lost work time	1	2	2	0	3	8
	No lost work time injuries	11	7	5	6	12	41
	Minor injuries	3	2	0	4	14	23
	Total	15	11	7	10	29	72
FY 2018	Accidents resulting in lost work time	4	0	3	0	4	11
	No lost work time injuries	16	8	3	1	8	36
	Minor injuries	1	3	1	2	13	20
	Total	21	11	7	3	25	67

(Note) The data on employees of the Sumitomo Electric Group cover Sumitomo Electric and its 109 affiliates (excluding Sumitomo Wiring Systems, Ltd. (SWS) and the other listed companies), as well as the companies that are not affiliates of Sumitomo Electric but subject to occupational health and safety-related guidance and supervision by Sumitomo Electric. Employees of the SWS Group cover SWS and its affiliates.

Lost Time Injuries Frequency Rate* for Employees in Japan by Year



(Note) The lost time injuries frequency rate for employees in Japan in the Sumitomo Electric Group covers Sumitomo Electric and its 41 affiliates in Japan (excluding SWS and the other listed companies), and the frequency rate in SWS covers SWS.

Glossary * KKP
Abbreviation of KIBAN KYOHKA training Program, which is implemented to enhance knowledge and awareness of safety and promote the stimulation of safety activities

* Frequency rate
Number of deaths and injuries caused by industrial accidents per million working hours. Used to express accident frequency. The formula is: Number of deaths and injuries caused by industrial accidents / Total working hours × 1,000,000.

Environmental Preservation

CSR Priority Theme
Prevention of Global Warming

Passing on a better global environment to future generations is our mission

Today, companies are required to further enhance their environmental activities. I assume that environmentally progressive companies now aim to link corporate management to the environment more firmly and secure the level of environmental conservation demanded by society before developing their businesses.

While the Sumitomo Electric Group is confident that it has already been committed to energy saving, resource saving and other environmental activities, such commitment is a common practice nowadays and we need to take even more aggressive initiatives in the future. In the development of products, it is particularly important to change the way of thinking and set the perspective of environmental conservation as the starting point. In fiscal 2019, we enhanced our commitment to the Action ECO-22V Campaign, which was launched in fiscal 2017 to set our targets for fiscal 2022, by adding new initiatives and making revisions in five items.

For example, we revised the target for GHG emissions from production sites and now aim to reduce the emissions by 5% from the FY2017 level. We also added new initiatives such as the promotion of the introduction of renewable energy and the implementation of audits focusing exclusively on the items to reinforce the management of chemical substances in products. Also, in an effort to reduce a substantial amount of GHG emissions, we set a goal that aims even higher. While further enhancing the environmental awareness in the whole company, we will promote business operations based on the consideration of what we should do now to steadily fulfill our mission to hand down a better global environment to future generations.



Koji Matsunaga
Assistant Manager,
Safety & Environment
Department
Manufacturing Management
& Engineering Unit

Environmental Management

Environmental Policy

The Sumitomo Electric Group has developed its environmental policy based on its business philosophy, which forms the basis for its business management. The environmental policy, detailed below, places the highest managerial priority on activities related to preservation of the global environment.

Environmental Policy (extract)* Revised on April 1, 2020

Basic Philosophy

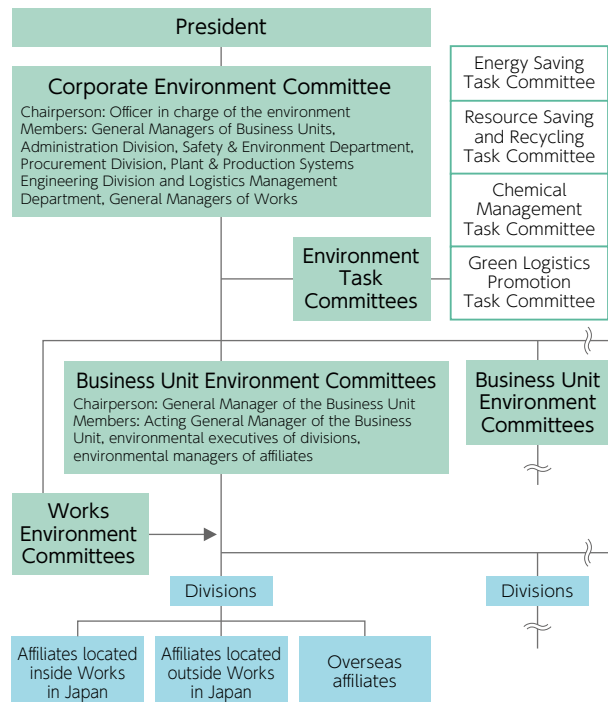
The Sumitomo Electric Group thinks it is primarily important to establish a society that is sustainable and has less environmental impact, and contributes to society by providing products and services.

Action Guidelines

1. Considering environmental preservation activity is one of the most important issues for corporate management, the Sumitomo Electric Group promotes the activity based on its action plan.
 - Reduce environmental impacts in manufacturing activities
Prevention of global warming, saving and recycling of resources, prevention of environmental pollution and protection of biodiversity
 - Increase environmentally-conscious products and services
Introduction of products that help prevent global warming, phase-out of harmful substances and implementation of product assessment
2. The Group will fulfill and enforce environmental management system.
 - Provision of educational programs on environmental preservation and implementation of environmental audits
3. The Sumitomo Electric Group will maintain and improve compliance action.
4. The Sumitomo Electric Group's Environmental Policy will be opened to the public upon request.

Organizations for Promoting Environmental Management

The Corporate Environment Committee deliberates and makes decisions on the Group's environmental preservation activities and oversees the activities on a global basis.



Action ECO-22V Campaign

The Sumitomo Electric Group has conducted the Action ECO-21 Campaign since April 2003, focusing on E: Environmental engineering C: environmental Communication O: Originality. Since fiscal 2018, we have conducted the Action ECO-22V Campaign as a five-year plan.

Targets of the Action ECO-22V Campaign • Period: FY2018 – 2022

Item	Descriptions	Targets for FY2022	Targets for FY2019	FY2019 results	Evaluation
Reduction of environmental impacts from business activities	(1) CO ₂ emissions (in Japan and overseas): reduction of the absolute amount	Reduce 0% from FY2017	Reduce 0%	Reduce 13%	◎
	(2) Energy saving (production sites): reduction of energy consumption per unit of sales [Consumption in crude oil equivalent / sales]	Reduce 5% from FY2017	Reduce 2%	Reduce 0.5%	▼
	(3) Energy saving (offices): reduction of energy consumption per unit of floor area [Consumption in crude oil equivalent / floor area x the number of employees]	Reduce 5% from FY2017	Reduce 2%	Reduce 6.2%	◎
	(4) Reduction of CO ₂ in logistics: reduction of CO ₂ per unit of sales	Reduce 5% from FY2017	Reduce 2%	Reduce 2.1%	○
Promotion of resource conservation and recycling	(1) Amount of waste (in Japan and overseas): reduction of waste amount per unit [Amount of waste (excluding valuable materials) / sales]	Reduce 5% from FY2017	Reduce 2%	Reduce 18.8%	◎
Reduction of substances of environmental concern	(1) Release of chemical substances (in Japan): reduction of the absolute amount of PRTR-designated substances	Reduce 5% from FY2017	Reduce 2%	Reduce 37%	◎
Reduction of environmental impact from products	(1) "Eco Mind" products	Register 100% of new products	100%	100%	○
	(2) Eco-products	70% of the ratio in sales (in Japan)	64%	64%	○
	(3) Products with less CO ₂ emissions	Contribute to reducing CO ₂ emissions by 150 thousand tons/year	135 thousand tons/year	144 thousand tons/year	○

Legend ◎: Performance far exceeding the target (by more than about 150%); ○: Target achieved; △: Target not achieved (performance improved from the previous fiscal year); ▼: Target not achieved (performance similar to that in the previous fiscal year); ▼: Target not achieved (performance deteriorating from the previous fiscal year)

The target for the reduction of GHG emissions was changed from no increase to reduction by 5% in fiscal 2020 to enhance the promotion of measures to prevent global warming. We also added the promotion of the introduction of renewable energy to the action items.

Furthermore, we added the reduction of water consumption and the management of chemical substances in products, to which we were committed in the past, to the items and also introduced the protection of biodiversity as a new item. We will disclose our specific environmental targets internally and externally and promote activities to reduce the environmental impact even more aggressively.

Item	Descriptions • Targets for FY2022	Targets for FY2020
Reduction of environmental impacts from business activities	(1) Reduce GHG emissions from production sites by 5% from the FY2017 level	Reduce 3%
	(2) Reduce energy consumption per unit of sales in production sites by 5% from the FY2017 level	Reduce 3%
	(3) Reduce energy consumption per unit of sales in offices by 5% from the FY2017 level	Reduce 3%
	(4) Reduce CO ₂ emissions per unit of sales from transportation by 5% from the FY2017 level	Reduce 3%
	(5) Promote renewable energy installation	Promote the introduction of photovoltaic power generation
Promotion of resource conservation and recycling	(1) Reduce amount of waste per unit by 5% from the FY2017 level	Reduce 3%
	(2) Reduce water use of per unit of sales by 5% from the FY2017 level	Reduce 3%
Reduction of substances of environmental concern	(1) Reduce the release of PRTR-designated substances by 5% from the FY2017 level	Reduce 3%
Protection of biodiversity	(1) Promote the protection of biodiversity	Implement protection activities
Reduction of environmental impact from products	(1) Maintain the registration of 100% of new products as "Eco Mind" products	100%
	(2) Increase the ratio of Eco-products in sales to 70%	66%
	(3) Reduce CO ₂ emissions by 150 thousand tons with products with less CO ₂ emissions	140 thousand tons/year
Management of chemical substances in products	(1) Strengthening the management of chemical substances in products	<ul style="list-style-type: none"> ● Implement audits ● Enhance training

Measures and Activities for the Environmental Risk Management Items of Sumitomo Electric

We examine measures to address risks and problems and formulate a growth strategy

Main environmental risks

Risk Factor		Impact	Countermeasures and Activities
Climate change	Physical risks	Temperature rise	Energy saving (evaluation, investment and activities), renewable energy
		Sea level rise	
		Increase in the size and frequency of typhoons	
	Regulatory risks	Regulations on atmospheric emissions and wastewater discharge	Implementation of detailed compliance audits
		Carbon pricing	Energy saving (evaluation, investment and activities)
		Reduction of GHG emissions	
Display of environmental labels		Development and marketing of eco-friendly products	
Renewable energy	Cost reduction and promotion of renewable energy		
Water	Physical risks	Supply shortage, seasonal and interannual fluctuations	Reduction of water withdrawal, formulation of emergency countermeasures, development of infrastructure
		Flood and drought	
		Deterioration of water quality	
	Regulatory risks	Restriction on water withdrawal/discharge	
		Soaring water prices	
	Reputation risks	Opposition from the local community	
Negative media coverage			
Waste	Difficulty in the disposal due to disqualification of the disposer, etc.		Reduction and recycling of waste, management of the disposer through on-site checks
	Notification of difficulty in the disposal from the disposer		
Chemical substances	Certification that no prohibited substances are contained in products		Evaluation at the development stage and management at the purchase and manufacturing stages
Environmental accidents	Shut-down (suspension) of operation		Prevention through the evaluation of facilities
Non-compliance with law	Shut-down (suspension) of operation		Implementation of detailed compliance audits
	Payment of fine		

(Direct risks) Investment in equipment for responses to regulations, increases in energy cost, restriction on energy use, shut-down (suspension) due to wind or water damage

(Indirect risks) Increases in the costs of raw materials, energy, water, waste, etc., suspension of operation due to an accident or non-compliance with law

Education and Training

We provide systematic education programs on environmental conservation

To realize environmental management, the Sumitomo Electric Group works to enhance every employee's environmental awareness and knowledge. We provide all employees with education on the history of measures to protect the global environment as well as the Group's environmental policy and the Action ECO-22V Campaign.

The managerial post-based career training program involves legal and general education on the environment. Since fiscal 2014, the program has been provided through on-site practical training sessions including on-site inspection of environmental facilities to enhance sensibility in environmental management. We also organize training on environmental laws and technical education on chemical management and other issues on a regular basis. Training for assistant plant managers was added to the program in fiscal 2018.

Training opportunity	Title of the training
Career (managerial post-based)	• Position-based training
Nomination-based	• Training on the management of poisonous and deleterious substances • Training on the notification of facilities subject to environmental laws
Optional	• Professional education on environmental laws • Training on energy saving design • Training on the Japanese Chemical Substances Control Act • PRTR (Pollutant Release and Transfer Register) training • Training on the management of chemical substances in products
On-site	• Training on Energy Saving Handbook • Action ECO-22V

Global Environmental Audits

We implement audits of overseas sites, as well as sites in Japan, according to the environmental laws in the countries and regions where they are located

《 Environmental legal compliance audit 》

In addition to examinations based on ISO 14001, the Sumitomo Electric Group implements environmental audits with focus on compliance with environment-related laws and the efforts in the Action ECO-21 Campaign to ensure compliance with relevant laws and reduce environmental impact. The first round of the audits for manufacturing sites in Japan was started in fiscal 2008 and completed in fiscal 2011. We are scheduled to complete the second round within fiscal 2020.

Environmental audits of manufacturing sites outside Japan were also launched in fiscal 2010. As of the end of fiscal 2018, we have completed 48 of the 53 sites subject to audits: We are planning the audits with focus on our sites in China in fiscal 2020.

《 Evaluation of Facilities That May Affect Water Quality 》

In response to a revision of Japanese Water Pollution Control Law in 2012, we started the evaluation of facilities that use any of the hazardous substances, designated substances, oils, etc. and may thereby affect water quality. The equipment and ancillary facilities are inspected to assess the management status on the check items set for each of the parts such as liquid storage and pipes. In Japan, we completed the first round of the evaluation by fiscal 2016 and have conducted environmental audits that combine legal compliance checks with evaluations on water quality since fiscal 2016. We also started the evaluation of overseas sites in fiscal 2013 and conduct environmental audits that combine legal compliance checks with evaluations on water quality as we do in Japan.

《 Check of the Progress in the Activities of the Action ECO-22V Campaign 》

We have set check items for environmental audits and evaluate the activities and progress.

《 Confirmation of Legal Compliance 》

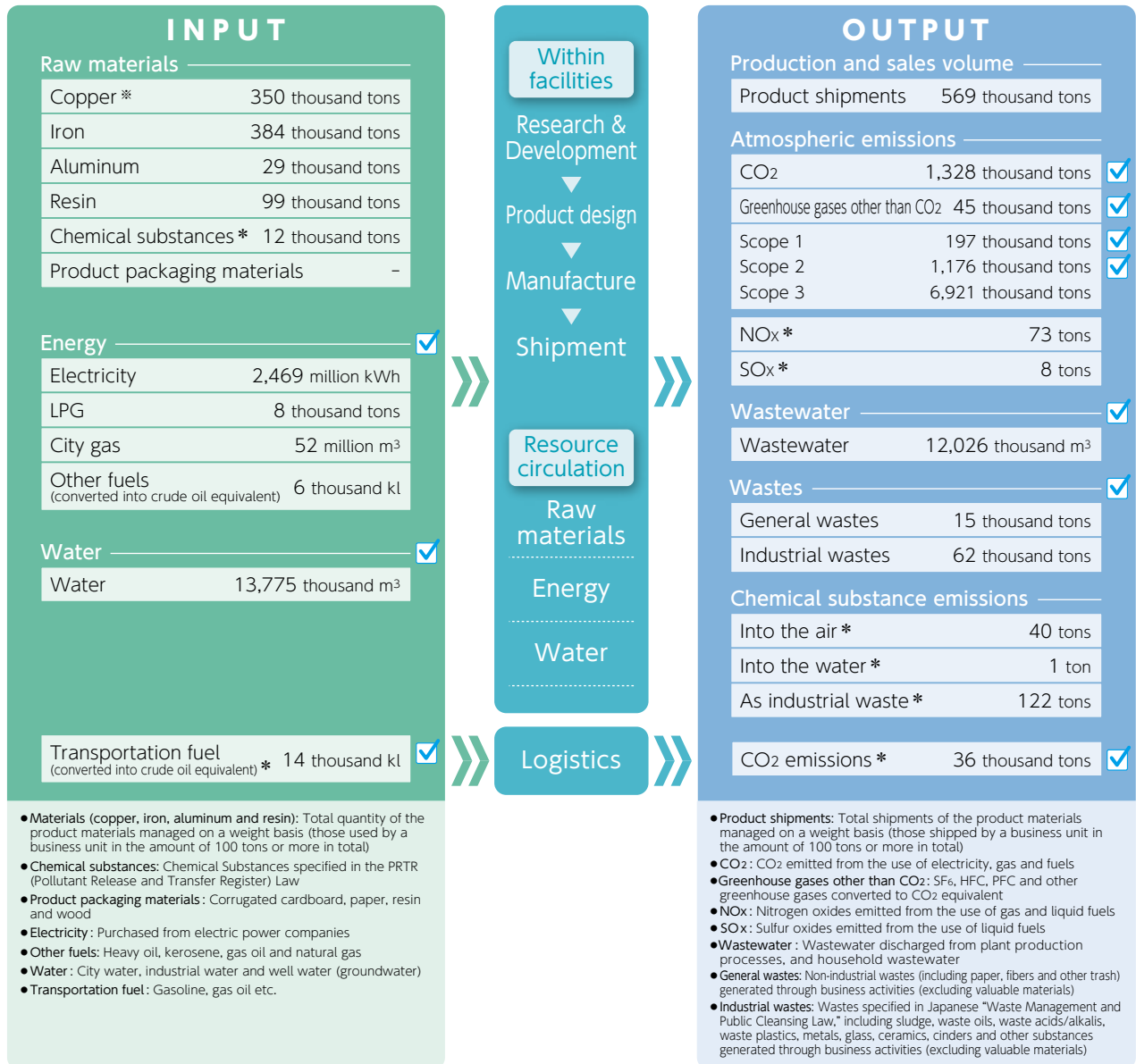
In fiscal 2019, two violations of laws and regulations (cases where guidance, recommendation or order to pay fine was issued by the authority) were reported by Sumitomo Electric and its Group companies to the Safety & Environment

Department of Sumitomo Electric, decreasing from five violations reported in fiscal 2018.

An affiliate in China received an order from the authority to pay a fine for non-compliance by failing to make notification in September 2019. Another affiliate in Japan exceeded the regulatory value on effluent and received guidance from the authority in December of the same year.

We will continue to strive for a proper understanding of the regulations in the respective regions to ensure thorough compliance.

Material Balance (Environmental Impacts)



Boundaries of data integration Items with *: Sumitomo Electric + affiliates in Japan; Items without *: Sumitomo Electric + affiliates in Japan and overseas
 ※In the Environment and Energy Group, which is included in the boundary of data collection, only data on the amount of the materials purchased by the Procurement Division of Sumitomo Electric alone are covered.

Explanation of the Boundary

In promotion of environmental management, Sumitomo Riko Company Limited, Nissin Electric Co., Ltd., SUMITOMO DENSETSU CO., LTD. and TECHNO ASSOCIE Co., Ltd., which are listed in the stock exchange in Japan, and their consolidated companies are excluded from the boundaries of the environmental management of the Sumitomo Electric Group although these companies are included in the boundaries of consolidation for financial reporting. When the comprehensiveness of the boundaries is assessed based on greenhouse gas (GHG) emissions, a representative environmental indicator, the emissions from the boundaries of the environmental management of our group, 1,373 thousand tons, account for the vast majority of 1,800 thousand tons, which are estimated GHG emissions from the boundaries of consolidation for financial reporting in fiscal 2019. In the meantime, out of the 258 consolidated subsidiaries excluding the 4 listed companies mentioned above, the environmental management of our group covers 147 companies in production units (41 in Japan, 31 in China, 37 in Asia (except China), 19 in the Americas and 19 in Europe and other in fiscal 2019). Our trial calculation indicates that environmental impact, such as GHG emissions, of the 147 companies is estimated to occupy 99% of that of the 258 subsidiaries.

Activities to Prevent Global Warming

Reduction of Greenhouse Gas Emissions

Our GHG emissions decreased substantially from the base year both in Japan and overseas

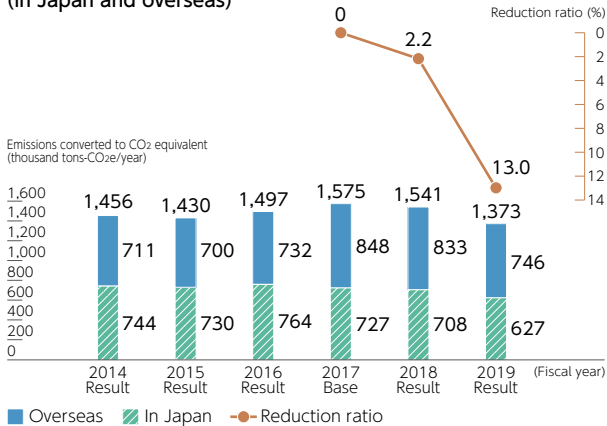
The Sumitomo Electric Group has worked to meet the target for fiscal 2022 of achieving no increase in GHG emissions from the fiscal 2017 level as an initiative to prevent global warming.

Each division is actively committed to environmental activities with focus on the promotion of energy saving. Moreover, while serving as the organizer, the Energy Saving Office promotes energy saving activities across the Sumitomo Group through cooperation with the task committee member appointed from each division.

With these activities and partly due to a decrease in CO₂ emission factor for electricity, as well as a fall in production caused by the COVID-19 pandemic in the second half, our GHG emissions in fiscal 2019 decreased from the fiscal 2017 level both in Japan and overseas. The emissions in the whole Group declined by 13% from the fiscal 2017 level.

From fiscal 2020, we set a higher target of reducing GHG emissions by 5% from the fiscal 2017 level by fiscal 2022 and promote the activities to meet the target.

Greenhouse Gas Emissions and Reduction Ratio (in Japan and overseas)



(Note 1) The results in fiscal 2017 and thereafter were calculated as mentioned below.

GHG emissions are calculated based on the Greenhouse Gas Emissions Accounting and Reporting Manual Ver. 4.6 (2020) by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry (except the emission factors, which are mentioned below).

Basic policy on the emission factors: The latest available emission factors at the time of the calculation are used for purchased electricity while fixed emission factors are used for other than purchased electricity.

CO₂ emission factor for purchased electricity:

[In Japan] Adjusted emission factor of each electricity power supplier published in the "Disclosure of basic emission factor, adjusted emission factor, etc. of each electricity power supplier for fiscal 2018" (2019) by the Japanese Ministry of the Environment

[Overseas] Emission factor in each country for 2017 mentioned in "CO₂ Emissions from Fuel Combustion 2019" (2019) by IEA

CO₂ emission factor for other than purchased electricity:

[Both in Japan and overseas] Emission factor in "Greenhouse Gas Emissions Accounting and Reporting Manual Ver. 4.6" (2020) by the Japanese Ministry of the Environment and the Ministry of Economy, Trade and Industry

(Note 2) The results for the period from fiscal 2014 to 2016 were calculated as mentioned below.

GHG emissions are calculated based on the Greenhouse Gas Emissions Accounting and Reporting Manual Ver. 3.5 (2014) by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry (except the emission factors, which are mentioned below).

Basic policy on the emission factors: fixed emission factors are applied

CO₂ emission factor for purchased electricity:

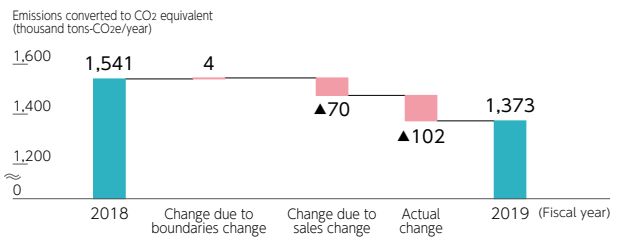
[In Japan] Actual emission factor of each electricity power supplier published in the "Disclosure of actual emission factor, adjusted emission factor, etc. of each electricity power supplier for fiscal 2012" (2013) by the Japanese Ministry of the Environment

[Overseas] Emission factor in each country for 2011 mentioned in "CO₂ Emissions from Fuel Combustion 2013" (2013) by IEA

CO₂ emission factor for other than purchased electricity:

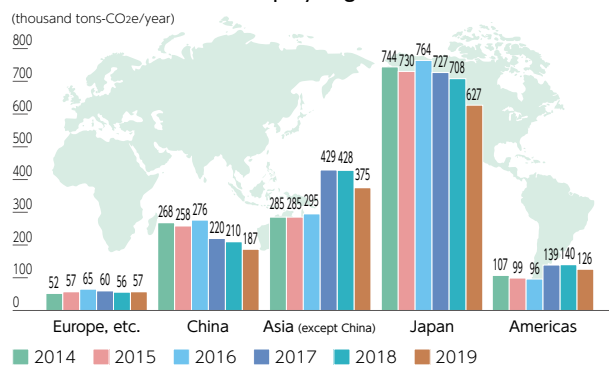
[Both in Japan and overseas] Emission factor in "Guidelines for accounting of greenhouse gas emissions from industrial commercial sectors" (2003) by the Japanese Ministry of the Environment

Factor Analysis of Changes in Greenhouse Gas Emissions (in Japan and overseas)



(Note 1) Change due to boundaries change: Emissions in fiscal 2018 from the boundaries of collection newly added or excluded in fiscal 2019.
Change due to sales change: [Emissions in fiscal 2018 from the boundaries of collection for fiscal 2019] × (Sales in fiscal 2019 / Sales in fiscal 2018 - 1)
Actual change: Calculated by subtraction

Greenhouse Gas Emissions from the Global Operations of the Sumitomo Electric Group by Region



Reduction of Energy Consumption

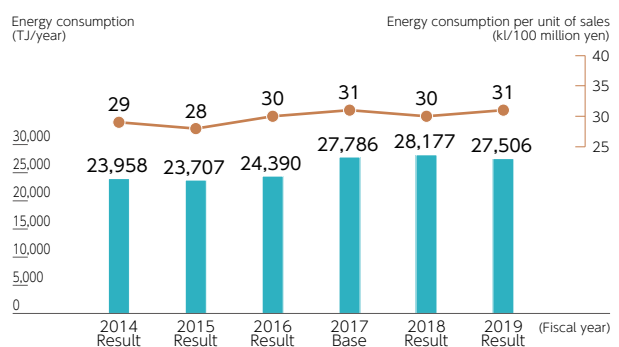
Production efficiency has been improved

In fiscal 2019, we reduced energy consumption per unit of sales by 0.5% from the fiscal 2017 level although we failed to meet the target.

While sales decreased this fiscal year due to the impact of the COVID-19 pandemic, the steady efforts of the divisions to improve energy efficiency resulted in the reduction of per-unit energy use.

In the future, we will continue the evaluation of energy consumption per unit of production in each division for further improvement, and strive to meet the target for the whole Group through the achievement of the target in each division.

Energy Consumption and Energy Consumption per Unit of Sales (in Japan and overseas)



(Note 1) Energy consumption per unit of sales: Crude oil equivalent of energy consumption divided by sales

Emission data for Scope 3

We provide data to CDP*

In fiscal 2014, we started to publish our emission data for Scope 3 and receive independent assurance on Category 4: Upstream transportation and distribution.

Greenhouse Gas Emissions in FY2019 (thousand tons-CO₂e/year)

Scope	Emissions (thousand tons-CO ₂ e/year)	Assurance	
Scope 1	197	✓	
Scope 2	1,176	✓	
Scope 3	6,921		
Category	Description	Emissions (thousand tons-CO ₂ e/year)	
1	Purchased goods and services	2,398	
2	Capital goods	583	
3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	249	
4	Upstream transportation and distribution	36	✓
5	Waste generated in operations	30	
6	Business travel	37	
7	Employee commuting	81	
8	Upstream Leased Assets	—	
9	Downstream Transportation and Distribution	—	
10	Processing of Sold Products	—	
11	Use of Sold Products	3,507	
12	End-of-Life Treatment of Sold Products	—	
13	Downstream Leased Assets	—	
14	Franchises	—	
15	Investments	—	

(Note 1) (-) indicates that the calculation method is under consideration or the category is not applicable.

(Note 2) Scope 1: Direct emissions from the use of fossil fuels, etc. in our facilities (including SF₆ and other greenhouse gases)

Scope 2: Indirect emissions from the use of electricity and steam supplied from outside our facilities
Scope 3: Total emissions not only from the reporting organization but also from all sources related to its business activities

(Note 3) The data for Category 4 in the table above cover logistics data in Japan only.

(Note 4) Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain, Ver. 2.3 of the Japanese Ministry of the Environment were referred to for the calculation.

Energy Saving Activities in Production Units

We are working to reduce wasteful use and improve efficiency with the effects of ideas for energy efficiency improvement

《Energy Efficiency Improvement Measures to Reduce Energy Use》

We work to meet the group-wide energy saving target of reducing energy consumption per unit of sales by 1% per annum from the fiscal 2017 level in the Action ECO-22V Campaign. Meanwhile, Group companies and divisions set the target of reducing energy consumption per unit of production by 2% per annum from the fiscal 2017 level and strive to meet it through the discovery of subjects for energy saving and promotion of activities in a planned manner. In fiscal 2019, while the target was a reduction of 2.0% from the fiscal 2017 level, we failed to meet the target but still reduced per-unit energy consumption by 0.5% despite a fall in production volume caused by the COVID-19 pandemic.

《Specific Measures》

To promote energy saving activities of Group companies and divisions, we have taken such measures as energy saving evaluation, measurement-based evaluation and horizontal deployment of technologies that had not been adopted in the Sumitomo Electric Group, and proposed new ideas.

From fiscal 2016, in addition to the proposal of ideas, we also promote cooperation in priority areas, in which we actually implement improvement measures in cooperation with divisions, and conduct the PDCA cycle to ensure the effectiveness.

The specific measures are described below.

●Measurement-based evaluation :

We use ultrasonic wave or infrared based instruments to determine the volume of steam and compressor air leaks. In addition to judgment on whether there is a leak or not, expected cost reduction effects are shown in a quantitative manner to facilitate improvements. We also started to promote IoT-based diagnosis for the monitoring of data in remote sites, which has been effective for the elimination of wasteful power consumption and the prompt detection of problems in equipment.

●Development and evaluation of new technologies :

Among the latest energy-saving technologies that have not been introduced in our Group, we identify those that are likely to be effective and evaluate their performance. We especially promote measures that focus on the recovery of waste heat to make effective use of unused heat. The new technologies evaluated as being effective will be adopted on a group-wide scale in the future.

●Cooperation in priority areas :

Divisions and the Manufacturing Management & Engineering Unit closely cooperate for improvement of overall efficiency while giving priority to the divisions with a relatively large share in energy consumption. In addition to tangible aspects such as equipment, intangible aspects such as production engineering are also considered in the improvement activities.

Energy Saving Activities in Offices

We are working to make employees always aware of energy saving

We have assigned a member and a vice member of the Workplace ECO Activity Promotion Committee in each workplace of the head offices, district offices and branch offices. The committee members perform and promote the following activities:

- ① Dressing cool in summer and warm in winter, to keep air conditioning moderate
- ② Turning off all office lights during lunch break
- ③ Turning off lights and air conditioners in meeting rooms and toilets when not in use
- ④ Introducing economy mode for PCs and power-saving OA devices on a preferential basis
- ⑤ Using zone lighting during overtime hours

Promotion of the Introduction of Renewable Energy

While the Sumitomo Electric Group conventionally promoted the introduction of photovoltaic power generation, we have added it to the action items of the Action ECO-22V Campaign to promote the introduction more actively. In the future, we will consider the installation of photovoltaic power generation equipment actively on such occasions as the construction of a new building.

Reduction of CO2 Emissions in Logistics

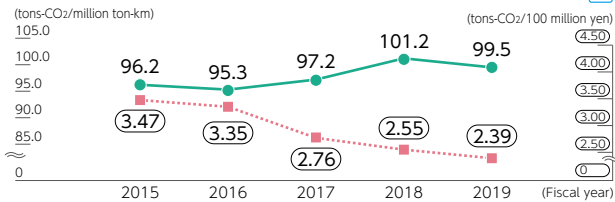
Decrease in per-unit CO2 emissions from transportation in Japan

Per-unit CO2 emissions from transportation in Japan were reduced by approximately 1.7% from the fiscal 2018 level in Sumitomo Electric (Note 1) and by approximately 6.1% in Sumitomo Wiring Systems, Ltd. As a result, the reduction rate in the whole Sumitomo Electric Group was approximately 3.4% (Note 2). The reduction in Sumitomo Electric was attributable to the shift of the transportation of copper wires from truck to rail. Produced copper wires had been temporarily transported by truck due to the disconnection of JR Sanyo Main Line as the result of heavy rain that hit western Japan in fiscal 2018. Since the line was fully restored at the end of March 2019, conventional rail transportation was resumed. Other factors that helped us reduce CO2 emissions included the dramatic reduction of urgent transportation of sintered products by 4-ton vehicle or light/compact vehicle due to the stabilization of the production as well as the use of coastal transportation from Hitachi and Toyoura Plants (current Overhead Transmission Line Division) for an overhead transmission cable installation project in Yamaguchi Prefecture.

In the meantime, Sumitomo Wiring Systems, Ltd. reduced per-unit CO2 emissions through such initiatives as the review of its transportation network and the reorganization of relay points to improve the loading efficiency and reduce the number of trucks used for transportation.

Our Group also works to secure transportation capacity in the event of a natural disaster and improve transportation efficiency through initiatives including the shift of railway transportation to coastal transportation, as well as the use of a 21-m full trailer truck to promote the extension of transportation sections.

Per Unit CO2 emissions by Year



● Sumitomo Electric Group (Sumitomo Electric + 31 manufacturing companies in Japan (excluding Sumitomo Wiring Systems, Ltd.))

● Sumitomo Wiring Systems, Ltd.

(Note 1) Sumitomo Electric and its 31 manufacturing companies in Japan (excluding Sumitomo Wiring Systems, Ltd.)

(Note 2) Per unit CO2 emissions in the Sumitomo Electric Group compared with the previous fiscal year Sumitomo Wiring Systems, Ltd. adopts CO2 emissions per sales amount as the basis for the calculation while other Group companies use CO2 emissions per cargo transport (t-km). Therefore, the weighted average of each year-on-year CO2 emission reduction rate is calculated based on the CO2 emissions.

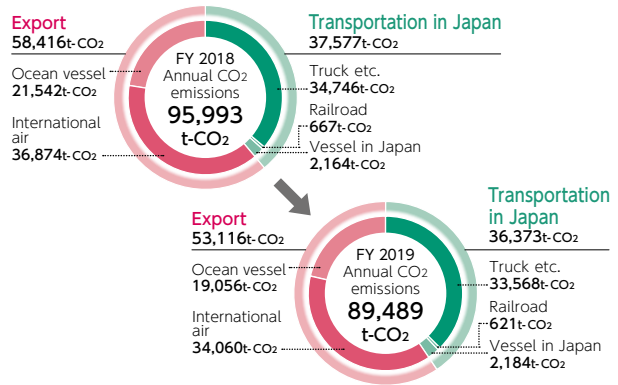
Changes in CO2 emissions

CO2 emissions from transportation in Japan decreased by approximately 2.6% from the fiscal 2018 level in Sumitomo Electric and by approximately 4.2% in Sumitomo Wiring Systems, Ltd. As a result, the reduction rate in the whole Sumitomo Group was approximately 3.2%.

Meanwhile, CO2 emissions from exports in Sumitomo Electric dropped by approximately 1.1% due to a significant decline in marine and air transportation to China and air transportation to Southeast Asia and other reasons despite an increase in the use of flights to North America by about 40%.

In Sumitomo Wiring Systems, Ltd., CO2 emissions from exports also decreased by roughly 18% due to the significant reduction of air transportation by about 30%, as well as the reduction of marine transportation to North America and Europe by about 16%.

With those changes, the CO2 emissions in the Sumitomo Electric Group as a whole decreased by approximately 6.8% from the fiscal 2018 level to 89,500 tons.



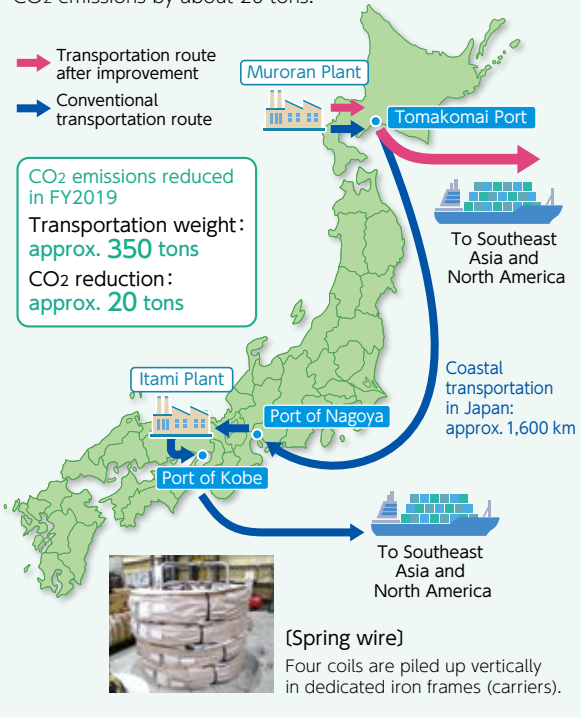
(Note) Boundaries of data collection: Sumitomo Electric + 31 manufacturing companies in Japan + Sumitomo Wiring Systems, Ltd.
CO2 emissions in Japan are calculated on an improved ton-kilometer basis and a fuel-efficiency basis. CO2 emissions from export activities are calculated using the conventional ton-kilometer method. Based on the simple calculation tool for logistics CO2 emissions by Policy Research Institute for Land, Infrastructure, Transport and Tourism (PRILIT)

Reduction of transportation distance in Japan with changes in the ports of shipment for exports

Sumitomo Electric exports spring wires produced in Muroran Plant to Southeast Asia and North America. Conventionally, those products were delivered to Itami Plant, our main plant, by coastal transportation first and then exported from the Port of Kobe together with products produced in Itami Plant.

Partly due to the recent growth in the production volume in Muroran Plant, the products of the plant are now exported directly from Tomakomai Port, which is the nearest port to the plant, to reduce the domestic transportation from Muroran to Itami (about 1,600 km).

As a result of this shift, products of about 350 tons were exported from Tomakomai Port in fiscal 2019 to reduce CO2 emissions by about 20 tons.



Sumitomo Electric has acquired certification as a company engaged in the initiatives of Eco Rail Mark* from the Railway Freight Association.



Glossary * Eco Rail Mark

A certification mark awarded by the Ministry of Land, Infrastructure, Transport and Tourism, Government of Japan. The use of the mark is allowed only for products or companies that use rail transportation, which generates relatively less CO2 emissions and is therefore environmentally friendly, in accordance with designated criteria. The mark included in packages and advertisements of products serves as a judgment standard for customers' purchase decisions.

Promotion of Resource Conservation and Recycling

Reduction of the Amount of Waste and Promotion of Recycling

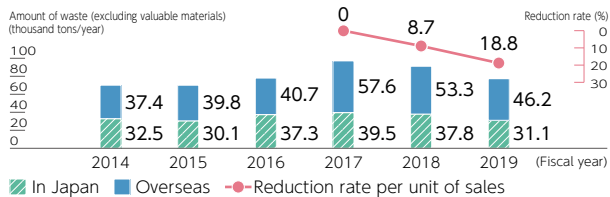
We are working to manage waste in a proper manner

《Reduction of the Amount of Waste》

The Sumitomo Electric Group is also committed to reducing the amount of industrial waste generated in its facilities by improving production efficiency.

To reduce the amount of waste, we promote conversion of the waste into valuable materials through separation and search of uses, and also focus on reduction of defects and review of the process that caused defects in production sites, which are fundamental activities for manufacturing, as well as in-house reuse of the waste generated and reduction of waste volume. In the Action ECO-22V Campaign, we are working to meet the target of reducing amount of waste per unit of sales by 1% per year with fiscal 2017 as the base year. In fiscal 2019, the per-unit amount was reduced by 18.8% from the fiscal 2017 level. The amount is on a downward trend with the effects of our response to an increase in waste plastic as a result of the restriction on the imports of waste plastic in China, which occurred in fiscal 2017. Other initiatives including the prevention of troubles in the waste liquid treatment equipment, the promotion of proper waste management and the introduction of equipment to reduce waste volume have also constituted to the reduction. We will continue to make efforts with focus on recycling of plastic through the thorough separation of waste plastic and the reduction of unneeded materials generated through waste liquid treatment.

Amount of Waste (excluding valuable materials) and Reduction Rate per Unit of Sales (in Japan and Overseas)



(Note) Amount of waste per unit of sales: Amount of waste (excluding valuable materials) divided by consolidated sales

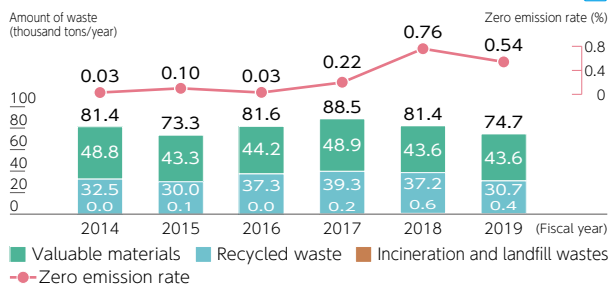
《Promotion of recycling (in Japan)》

To help solve social problems, such as shortage of waste disposal sites and illegal waste dumping, and to make effective use of resources, it is necessary to avoid landfilling of industrial waste easily and recycle waste to the extent possible. The Sumitomo Electric Group also works to reduce the zero emission rate. In Japan, while the rate has been on an increasing trend since fiscal 2018 due to the issue of waste plastic in China, it slightly declined to 0.54% in fiscal 2019.

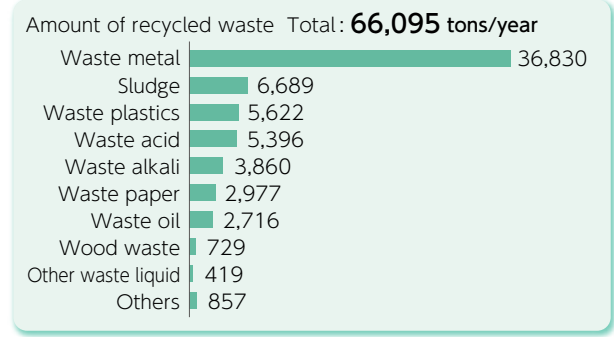
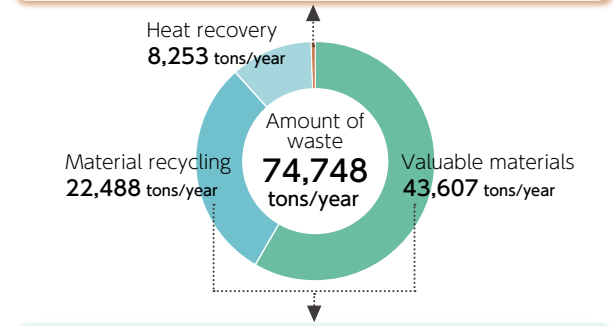
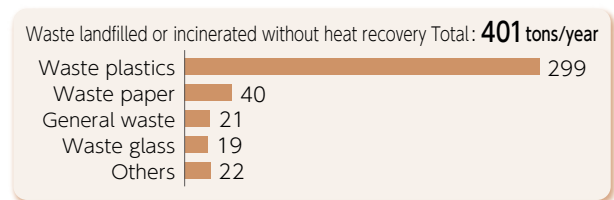
$$\text{Zero emission rate (\%)} = \frac{\text{Amount of waste incinerated without heat recovery} + \text{Amount of landfill waste}}{\text{Amount of industrial waste} + \text{Amount of general waste} + \text{Amount of valuable materials}} \times 100$$

(Note) From the Action ECO-21 (Phase VI) Campaign launched in fiscal 2015, all valuable materials, part of which were not included in the denominator until fiscal 2014 (the materials that were already treated as valuables in fiscal 2000), are included in the denominator.

Amount of Waste and Zero Emission Rate (in Japan)



Amount of Waste by Type in FY2019 (in Japan)

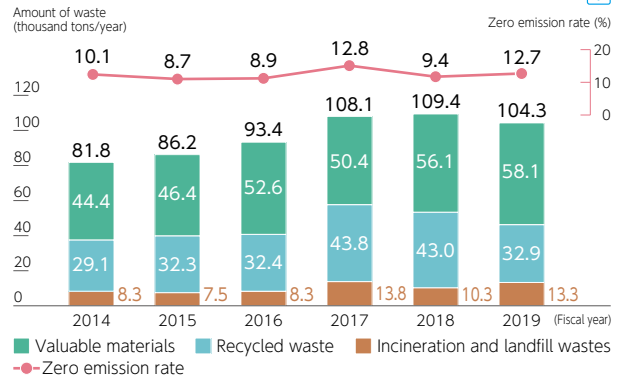


Promotion of Recycling (overseas)

We are promoting waste management outside Japan

While the situation of landfill sites overseas is different from that in Japan, the Sumitomo Electric Group refrains from landfilling industrial waste easily and works to recycle and convert waste into valuable materials to the extent possible through separation of waste and other efforts to maintain proper waste management in the overseas bases as well. We also operate in countries where the environment for recycling has not been developed, and will be continuously committed to the reduction of the zero emission rate on a global scale.

Amount of Waste and Zero Emission Rate (Overseas)



(Note 1) From fiscal 2019, results in KPMC* and NIRE*, which were working to establish a data collection system, as well as some other newly established bases, are added to the data collection. As a result, the amounts of incineration and landfilled wastes, recycled waste and valuable materials increased by approximately 2.1 thousand tons, 0.2 thousand tons and 2.6 thousand tons, respectively.

(Note 2) From fiscal 2019, customer service centers and other overseas non-production bases are excluded from the collection of data because we have decided to include the data of production bases only. In fiscal 2018, the total amount of waste discharge and valuable materials sold in the excluded bases was 6.3 thousand tons.

Reduction of the Release of Harmful Chemical Substances

Chemical Substance Management System

We have established an original system to unify the management of chemical substances

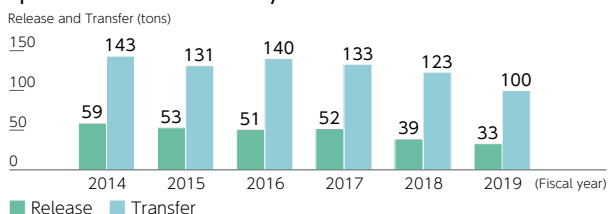
The Sumitomo Electric Group established a chemical management system, and started the management of poisonous and deleterious substances and PRTR-designated substances in Sumitomo Electric's three Works in Osaka, Itami and Yokohama, and our affiliates in the Works in fiscal 2011. The system is also used to collect data for reporting under the PRTR Law*. In fiscal 2012, domestic affiliates outside the three Works also launched the operation of this system in sequence, which enabled the search of the companies using poisonous and deleterious substances and safety data sheets (SDS) concerning all poisonous and deleterious substances used in affiliates in Japan. From fiscal 2019, our Ibaraki Works, which was newly established, is included in the collection of data. We will continue our efforts to enhance the management of chemical substances used in the Group.

Release and Transfer of Chemical Substances Specified in the PRTR Law

The whole Group, including overseas affiliates, is submitting reports in accordance with the applicable laws

Sumitomo Electric and its affiliates in Japan, using the chemical substance management system developed by the Company, measure the amount of PRTR substances treated per month, and calculate the amount of these substances released and transferred in order to report annually in accordance with the law. A total of 38 sites of Sumitomo Electric's Osaka and Yokohama Works and 26 Group companies submitted such reports for fiscal 2019. Sumitomo Electric Group's total release and transfer of PRTR-designated substances in Japan were 33 tons and 100 tons, respectively.

Release and Transfer of Chemical Substances Specified in the PRTR Law by Year



* The amounts are calculated in accordance with PRTR Release Estimation Methods Manual, version 4.1 (2011) by the Ministry of the Environment and the Ministry of Economy Trade and Industry of Japan.

Release and Transfer of Chemical Substances Specified in the PRTR Law

Chemical substance	Release					Transfer			Total amount
	Into air	Into water	Into soil	Into landfill	Total release	By sewage	By disposal	Total transfer	
Nickel compounds	0.0	0.1	0.0	0.0	0.1	0.0	20.2	20.2	20.3
Toluene	12.0	0.0	0.0	0.0	12.0	0.0	4.6	4.6	16.6
Phenol	3.8	0.0	0.0	0.0	3.8	0.0	10.1	10.1	13.9
Cresol	2.8	0.0	0.0	0.0	2.8	0.0	8.3	8.3	11.1
1,2-dichlorobenzene	2.4	0.0	0.0	0.0	2.4	0.0	7.8	7.8	10.2
ethanolamine	0.0	0.0	0.0	0.0	0.0	0.3	9.7	10.0	10.0
Boron compounds	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
Xylene	0.9	0.0	0.0	0.0	0.9	0.0	4.0	4.0	4.9
N,N-dimethylacetamide	1.8	0.0	0.0	0.0	1.8	0.0	2.4	2.4	4.2
1-bromopropane	3.4	0.0	0.0	0.0	3.4	0.0	0.4	0.4	3.8
34 other substances	4.6	0.7	0.0	0.0	5.3	0.1	26.8	26.9	32.2
Total	31.7	0.8	0.0	0.0	32.5	0.4	99.6	100.0	132.5

(Unit: tons)

Chemical substance	Release					Transfer			Total amount
	Into air	Into water	Into soil	Into landfill	Total release	By sewage	By disposal	Total transfer	
Dioxins	1	0	0	0	1	0	0	0	1

(Note) Boundary of data collection: Sumitomo Electric + PRTR obligatory companies among its affiliates in Japan

(Unit: mg-TEQ)

Reduction of the Release of Chemical Substances Specified in the PRTR Law

We are committed to reducing the release of chemical substances specified in the PRTR Law

We will be committed to reducing the absolute amount of the release of chemical substances specified in the PRTR Law by 5% as an initiative of the Action ECO-22V Campaign from fiscal 2018 to fiscal 2022. In fiscal 2019, we made efforts to meet the target of reducing the amount by 2% from the fiscal 2017 level. We worked to cut the atmospheric release in the sites that release 1 ton or more to the air in a year to reduce the annual release by 37.2% from the fiscal 2017 level to 31.7 tons in fiscal 2019, which met the above-mentioned target.

Soil and Groundwater Remediation

We disclosed the pollution status of three major Works (Osaka, Itami and Yokohama) in August 2001. At those three Works and other domestic sites where pollution has been identified through our surveys conducted thus far, we are continuing soil and groundwater remediation by soil replacement, groundwater pumping and soil gas absorption. We also conduct groundwater monitoring on a regular basis, and have confirmed that the pollution has not spread outside the sites.

Measures against Dioxins and Asbestos

The aluminum alloy manufacturing facility and its exhaust gas purification facility at Sumitomo Electric Toyama Co., Ltd. are subject to the Law Concerning Special Measures against Dioxins. We have ensured that emissions from these facilities remain within regulated standards.

At present, the Sumitomo Electric Group produces no products using asbestos.

Initiatives to Address Water Risks

Basic Approach

The impact of global warming on the global environment has attracted much attention in recent years and water resource problems are also recognized as large risks that can affect the operation of the Sumitomo Electric Group. Institutional investors and clients require us to respond to the problems to sustain the operation. In addition to the shortage of water supply, water-related issues include deterioration of water quality, flood damage, tightening of relevant government regulations and relationships with communities in the neighborhood. The Sumitomo Electric Group is working to understand the current situation of these issues and taking measures to address them.

Evaluation of Water Risks on a Global Scale

We set up Water Risk Countermeasure Working Group

While Sumitomo Electric has used CDP questionnaires for information disclosure since fiscal 2016, we did not understand what water risks exist in the locations of our bases around the world or take measures to address them until the first half of 2017. Therefore, in the second half of the same year, we set an activity goal of "establishing a group-wide system to ensure that the production bases around the world independently understand the current situation of water risk, if any, identify the issues and design and implement measures to address them." As the first specific initiative, we set up Water Risk Countermeasure Working Group with members recruited from divisions and affiliates in January 2018 to establish a system to promote the unification of the action procedures to be applied throughout our group.

Next, we evaluated water risks in a total of 184 areas where our production bases are located in Japan and overseas. Aqueduct[®] was used as the tool to evaluate the risks indicated by 12 indicators in total, including water quantity, water quality, regulations according to local laws and relations with neighboring communities, on a five-point scale. With the results of this evaluation based on Aqueduct, we identified 32 production bases in Japan and overseas with many high-risk items and surveyed them through interviews to understand the actual situation. We also conducted a similar evaluation using Aqueduct in fiscal 2019 and identified one base in Vietnam where the risk was elevated by three levels, one base in the US where the risk was elevated by two levels, and two bases in the Philippines and one base in each of China, Indonesia, Mexico and Brazil where the risk was elevated by one level in comparison with that in fiscal 2018. These findings will be used in the environmental audits of those bases.

Development of the Activities on a Company-wide Scale

On the basis of findings from the above-mentioned risk survey with Aqueduct, we prepared a questionnaire to understand the actual situation of water risks throughout the Sumitomo Electric Group based on the CDP 2020 water management indicators. The questionnaire was then distributed to the 93 production bases in Japan and overseas selected as the targets for the promotion of environmental activities to collect information on the risks.

As an overall result, none of the bases were facing any major risk that could result in stopping their operation. Accordingly, we are currently designing measures to avoid risks with priority given to the risks that are shared by multiple bases and could have a major impact if they occurred.

Future Initiatives

We will promote activities involving the supply chain

Incorporating the concept of the CDP 2020 water questionnaire into the management indicators, we aim to reach a level where the actual situation of water risks is understood and measures to address them are taken. We will place particular emphasis on the following issues because we recognize that our activities to address them are insufficient at present:

- (1) We will establish the governance, business strategy and target of our Group for water-related issues in addition to the reduction of water consumption.
- (2) We will diffuse the risks identified in the above-mentioned survey and examples of the countermeasures and share information throughout the Group.
- (3) We will also manage the suppliers (the supply chain) as an initiative to respond to water risks.

Water Use Reduction

We monitor the total amount of water withdrawal

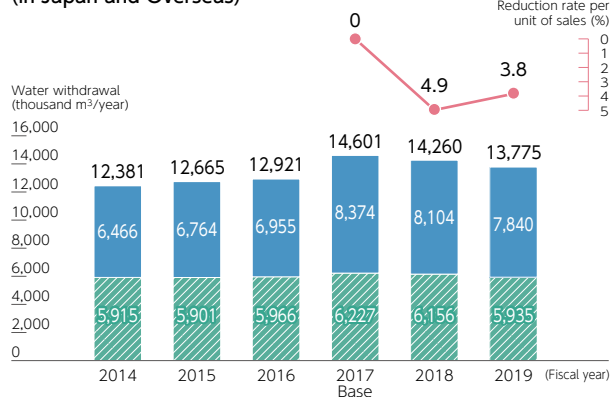
While the Sumitomo Electric Group launched activities to reduce water consumption in fiscal 2008, we set a target of reducing water consumption per unit of sales by 1% per year (with fiscal 2017 as the base year) in fiscal 2018. We are now committed to the reduction of water use to meet the target.

In fiscal 2019, while the total water consumption decreased year-on-year with the impact of a decrease in production volume in our overseas bases where the water consumption is especially high, water consumption per unit of sales was reduced by 3.8%.

In terms of water withdrawal by source, we take 87% of water from municipal water and 13% from groundwater. As to the destinations of the effluent, 68% is discharged into sewer systems while 23%, 8% and 1% of our effluent reach rivers, the sea and other destinations, respectively.

In the course of the reduction activities, we identify water leakage in our facilities and address it while also working to reduce water withdrawal through such initiatives as the reuse of effluent that used to be discharged.

Water Withdrawal and Reduction Rate per Unit of Sales (in Japan and Overseas)



(Note 1) Water withdrawal is calculated as the sum of the withdrawal of city water, industrial water and groundwater.

Glossary

* Aqueduct

A tool developed by the World Resources Institute (WRI) to evaluate water risks in various parts of the world. Water risks to the bases located on a world atlas are quantitatively evaluated on a five-point scale.

Expansion of Environmentally Conscious Products

Expansion of Environmentally Conscious Products

We are actively promoting assessment and development of environmentally conscious products

Along with the reduction of environmental impact from our business activities, Sumitomo Electric is striving to increase environmentally conscious products as an initiative stated its environmental policy.

Our products are assessed to determine their levels of social and environmental contribution and classified into, for example, Eco Mind products, Eco-products and anti-global warming products based on the levels. The assessment results are also used for development of new products.

《“Eco Mind” Products》

We perform environmental assessment of products when developing new products, as well as when making major design changes to existing products. The products having undergone product assessment are registered as “Eco Mind” products in the Sumitomo Electric Group.

By the end of fiscal 2019, a total of 1,328 items have been registered as “Eco Mind” products.

《Eco-Products (Eco Symbol Program)》

Among “Eco Mind” products, the products with particularly outstanding environmental features are examined in accordance with our Eco Symbol Program, which is based on ISO14021, and those that meet the criteria are certified as “Eco-products.” Through this system, we aim to promote development of environmentally conscious products and

strive to penetrate the market with them.

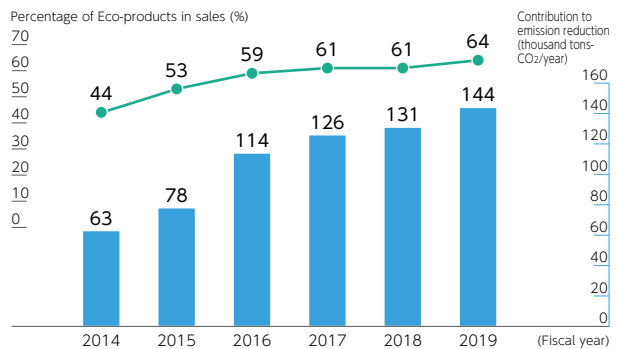
By the end of fiscal 2019, a total of 313 items have been registered as Eco-products. The sales ratio in fiscal 2019 was 64%.

《Anti-Global Warming Products》

In this system, we register the Eco products that especially contribute to the reduction of CO₂ emissions in the production stage or when they are used by customers, and calculate the reduction effect.

The products contributed to the reduction of CO₂ emissions by a total of 144 thousand tons in fiscal 2019.

Percentage of Eco-Products in Sales and Contribution to the Reduction of CO₂ Emissions



· Calculation method

The percentage of Eco-products in sales is calculated as the value of the shipments* of the products certified Eco-products divided by the total value of shipments*.
 (* Shipments are those from manufacturing departments in Japan. However, they exclude shipments from electronic conductor departments, which mainly work to supply intermediate goods within the Group.)



Environmentally friendly products

High-efficiency PCD cutter for aluminum alloys ALNEX™ ANX Type



Cutting tool for aluminum alloys, which are essential for reducing the weight of vehicles, with even higher efficiency and longer life

High-efficiency PCD cutter for aluminum alloys “ALNEX™ ANX Type” is a cutting tool released in 2019. While demand for hybrid cars and electric vehicles is growing in expectation of a low-carbon society, aluminum is used in many of the parts of such vehicles because the metal is light in weight and high in thermal conductivity. This product has been developed to process aluminum more efficiently with longer life.

ALNEX™ ANX Type features a feed speed 2.8 times faster than that of conventional tools. This enables an equal or higher number of aluminum products to be processed with fewer machines than before. While the improvement of efficiency results in the use of less energy, the extension of the tool life, which was achieved by the unique alloy production technology we have developed, also helps save resources.

Moreover, we have in place a system to collect the cutting edge made of diamond from customers and regrind and return it to them for the recycling of resources.



Keiji Kinoshita
 Milling Tools Development Group
 Tool Designing Department
 Sumitomo Electric Hardmetal Corp.

Biodiversity

Basic Approach

We work to understand the big picture of environmental burdens and reduce them with the basic idea that all of the environmental burdens accompanying business activities have an impact on the biodiversity. In addition, we promote initiatives that can help protect the biodiversity throughout the businesses of the Sumitomo Electric Group, including the expansion of environmentally conscious products.

Action Policy for the Future

Based on the Sumitomo Spirit, which sets "mutual prosperity, respect for the public good," as a key principle, the Sumitomo Electric Group works to fulfill its social responsibility for sustainable development. To this end, we will expand environmental conservation activities across the Group including the reduction of GHG emissions to prevent global warming as well as the reduction of waste to control the expansion of waste landfill sites and thereby secure wildlife habitats.

We have added the protection of biodiversity to the action items of the Action ECO-22V Campaign to contribute to the protection through the development of products and technologies that can help protect the ecosystem, as well as the implementation of conventional initiatives in cooperation with local communities as presented in the example below.

Example of local activities

Participation in a committee to promote the restoration of Koya Pond (continued from April 2008)



In this initiative, as a member of the "Association to Preserve and Grow Nature of Itami," we engage in the weeding and removal of exotic plants around Koya Pond together with citizens to restore the original ecosystem with a rich natural environment.

Environmental Accounting

	Financial items									Non-financial items							
	Investment (million yen)			Expense (million yen)			Economic effect (million yen)			Change factors in FY2019 (in Japan)					Strategy/opportunity and risk		
	2017	2018	2019	2017	2018	2019	2017	2018	2019								
Reduction of greenhouse gas (GHG) emissions	Investment in energy saving (Note 1)						Reduction of energy cost (Note 1)			GHG emissions (thousand tons-CO ₂ e/year) (Note 4)					We set no increase in CO ₂ emissions from the FY2017 level as a KPI for fiscal 2022. To achieve it, we have defined the target of reducing energy consumption per unit of sales by 2% from the fiscal 2017 level and make various energy saving efforts. These activities are also important for the reduction of energy cost. The knowledge learned through the activities is also introduced into overseas Group companies.		
	2,630	2,857	1,651				723	268	351	2018	708	0	37	Actual change		▲118	2019 (Fiscal year)
Waste reduction	Investment in resource saving and recycling (Note 2)			Waste disposal cost (Note 3)			Sale of valuables materials (Note 3)			Amount of waste (excluding valuable materials) (thousand tons/year) (Note 4)					We have set the target of reducing the amount of waste per unit of sales by 2% from the fiscal 2017 level and take various resource-saving measures. To reduce the amount of waste, we are promoting the conversion of waste into valuable materials. While the amount of waste has increased due to the suspension of imports of recyclable waste by China, we will continue the activities to sell valuable materials produced from waste through the concentration of waste liquid, etc. as a method to reduce the amount.		
	18	0	14	1,294	1,240	1,302	69	43	72	2018	37.8	0	1.5	Actual change		▲8.2	2019 (Fiscal year)
Cost of management activities				975	934	859				Cost of environmental organization, ISO 14001 registration and maintenance, etc.					ISO 14001 is the core of our environmental management activities, and the certification is requested by customers.		
Cost of social activities				9	8	9				Cleanup of areas outside company sites, external environmental education, etc.						We consider cleanup of the neighboring areas as a basic social activity, and will continue our commitment to communication with local communities through this initiative.	
Cost of environmental remediation				8	11	9				Restoration of contaminated soil and groundwater					We continuously restore the contaminated soil and groundwater identified in our facilities.		

Boundaries of tabulation: Sumitomo Electric + affiliates in Japan

(Note 1) Only the amount of investment in the activities mainly aimed at energy saving among the activities certified as "energy saving activities" by the Energy Saving Office of the Safety & Environment Department is subject to the calculation (the activities mainly for the purposes other than energy saving, such as renewal of aging facilities and peak cut, are not covered). The economic effect includes that of the energy saving activities in which no investment has been made.

(Note 2) The amount of investment does not include investment related to efficient use of resources but covers investment for reduction of waste generation and recycling.

(Note 3) The cost is calculated based on payment to the waste disposal contractor. Metals are not included in the calculation of either cost or economic effect.

(Note 4) Change due to boundaries change: Emissions or amount of waste in fiscal 2018 from the boundaries of collection newly added or excluded in fiscal 2019 (no boundaries were newly added or excluded in this fiscal year).

Change due to sales change: [Emissions or amount of waste in fiscal 2018 from the boundaries of collection for fiscal 2019] × (Sales in fiscal 2019 / Sales in fiscal 2018 - 1)

Actual change: Calculated by subtraction

Corporate Governance

Basic Approach

Under our corporate philosophy of the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles, our group maintains its unwavering basic policy of contributing to society through our fair business practices. While adhering to this basic policy, in order to seek sustainable corporate growth and to increase corporate value over the mid-to-long term, we believe that it is critical to ensure transparency and fairness of management activities through appropriate corporate governance, as well as to draw up and implement a growth strategy fully utilizing our management resources, with the key word being “innovation.” We will be committed to further enhancing our corporate governance in accordance with the following basic ideas:

- (1) We will develop an environment in which shareholders can exercise their rights appropriately.
- (2) We will take the interests of shareholders and other stakeholders into consideration, and will appropriately cooperate with them.
- (3) We will disclose corporate information appropriately and ensure transparency.
- (4) We will emphasize the board of directors’ functions to make decisions on basic policy, including strategies, as well as to supervise management. We will also focus on organizing systems and operating the Board of Directors to ensure the effectiveness of such functions. In respect of executive operations, we have introduced an executive officer system and a business unit system, for the purpose of clarifying authority and responsibilities, and of establishing a flexible system to execute operations in response to changes in the business environment. From a viewpoint of ensuring sound management, we commit to strengthening audits by audit & supervisory board members and adopting a supervisory system under which independent outside audit & supervisory board members and full-time audit & supervisory board members work with our internal audit department and accounting auditors to ensure the lawful and proper management.
- (5) In order to contribute to sustainable growth and increase corporate value over the mid-to-long term, we will engage in constructive dialogue with shareholders to a reasonable extent.

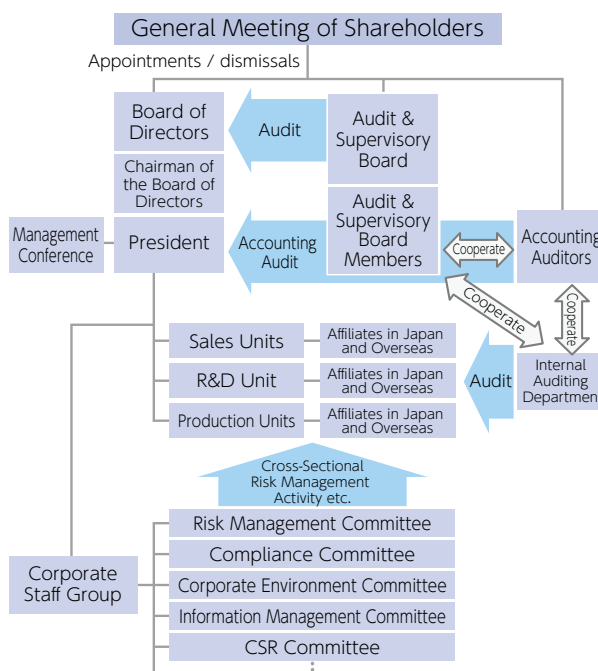
We have established Corporate Governance Guidelines setting forth our basic ideas and policy concerning corporate governance, which are made available on our website*. We also implement all of the principles in the Corporate Governance Code.

Outline of the Structure

Sumitomo Electric has employed the system with the audit & supervisory board in consideration of the contribution of audit & supervisory board members and the Audit & Supervisory Board to ensuring sound business management. The Board of Directors, the business execution system, audit & supervisory board members and the Audit & Supervisory Board are committed to fulfillment of their respective duties in order to achieve sustainable growth and medium- and long-term increases in the corporate value based on the basic philosophy. In addition, three outside directors are appointed to adopt an external perspective with the aims of further strengthening the supervising functions of the Board of Directors and enhancing the transparency and objectiveness of the business

management. We also select three outside audit & supervisory board members with various specialized knowledge and multifaceted views so that outside audit & supervisory board members occupy the majority of the Audit & Supervisory Board, which aims to reinforce the monitoring system for the purpose of ensuring lawful and proper management.

Sumitomo Electric Group’s corporate governance structure



The Board of Directors and the Business Execution System

《Functions and Operations of the Board of Directors》

While the board of directors of a company with an audit & supervisory board serves functions to make decisions on and supervise business execution, the Board of Directors of Sumitomo Electric deliberates only important issues among individual subjects, such as major investment items, and focuses on the medium-term business plan, annual plans based on it and quarterly follow-ups of the plans, so that it can appropriately perform the function to decide basic matters concerning the direction of the Company, as well as the supervising function. Independent outside directors are appointed in the Board of Directors as mentioned above to ensure multifaceted and sufficient discussions in the meetings, in which independent outside audit & supervisory board members are also provided with opportunities to present their opinions actively.

As to supervising function of the Board of Directors, while we respect opinions of the independent outside directors and other independent outside officers to ensure the independence and objectiveness, we have set up the Nominating Advisory Committee and the Compensation Advisory Committee, which are both chaired by an independent outside director and made up of a majority of independent outside officers, to enhance the effectiveness. The Committees give advice when the Board of Directors appoints candidates for directors and audit & supervisory board members and makes a decision on the compensations of directors.

Sumitomo Electric holds monthly meetings of the Board of Directors as well as extraordinary meetings when necessary. In the meetings, which are chaired by Chairman, the Board of Directors deliberates and takes decisions on the matters

mentioned above, makes decisions on the basic policy of the internal control system and supervises the development and operation of the system. There are currently 12 Directors in the Company, who are comprised of 9 Executive Directors and three outside Directors not involved in business execution, and one of them is a female outside Director. For fiscal 2019, 11 Directors (excluding three outside Directors) received 741 million yen in total.

《Effectiveness Analysis and Assessment of the Board of Directors》

The Board of Directors started to analyze and evaluate its effectiveness and disclose a summary of the results in fiscal 2015. As an initiative for fiscal 2019, it conducted a questionnaire survey of all directors and audit & supervisory board members including outside officers in March 2020 and made discussions based on the results at a Board of Directors meeting held in May of the same year. The results of the analysis and assessment and future initiatives are summarized below:

① Operation of the Board of Directors and advisory committees for the nomination and compensation of executives, directors, etc.

The findings showed that the operation of the Board of Directors has been improved through the clarification of key points in the handouts for discussions, the review of guidelines for explaining the issues to be discussed and other efforts to ensure that sufficient time for discussions can be set aside and discussions can be further enhanced. In the meantime, it was found that efforts have been made to enhance measures to help outside officers improve their understanding of our business such as the provision of outside directors with opportunities to individually talk with the general managers of business units. The findings also showed that the operation of the Nominating Advisory Committee and the Compensation Advisory Committee and the reporting of the discussions to the Board of Directors have been conducted generally properly. We will continue to work for the improvement of the operation in the future.

② Structure of the Board of Directors

The findings showed that the increase in outside directors and other structural changes have enabled the Board of Directors to make more active and multifaceted discussions and that the structure and other aspects of the Board of Directors are generally appropriate in terms of the number of members and the overall balance of their knowledge and experience. In the future, while also considering social trends and other issues, we will continue to examine the ideal state of the Board of Directors in terms of structure and other aspects to contribute to the sustainable growth of Sumitomo Electric and mid- to long-term improvement of the corporate value.

③ Role of the Board of Directors

The findings showed that the Board of Directors basically plays its role in "deliberating and determining on the basic management policy and other important corporate issues" and "supervising the business execution of directors" through its activities including active discussions in deliberation on important matters and at the time of quarterly performance reporting and reporting on the progress of the improvement of the internal control system. On the other hand, as the future challenges, we will continuously examine the subjects to be discussed in the Board of Directors while taking a medium to long-term perspective and a group-wide perspective. We will also strive to increase opportunities for risk analysis and assessment before discussions in the Board of Directors to enhance the discussions of important matters. From 2019, outside directors and outside corporate auditors have dialogue with inside directors on the results of this analysis and assessment. In 2020, while making discussions in a similar way, we will continue to promote measures to further enhance the effectiveness of the Board of Directors.

《Business Execution System》

To clarify authority and responsibility in the business execution system and establish a flexible system that can respond to changes in the business environment, Sumitomo Electric adopted the Executive Officer System and the Business Unit System. Authority to execute business operations has been transferred to Business Units while their responsibility has been clarified, and to establish an internal check function, our corporate regulations specify the scope of authority of each of the Business Units including the Corporate Staff Group, responsible personnel for the execution and appropriate business procedures.

Auditing and Supervision Systems

As to the audit & supervisory board members and the Audit & Supervisory Board, as mentioned above, the majority of the audit & supervisory board members are independent outside audit & supervisory board members with various specialized knowledge and multifaceted views. These members of the board, along with full-time audit & supervisory board members and dedicated staff to audit & supervisory board members, are in charge of monitoring in cooperation with the Internal Auditing Department and accounting auditors to ensure lawful and proper corporate management.

Five audit & supervisory board members, consisting of two full-time members of the board and three outside members of the board including a female one, constitute the auditing system to audit the business execution of directors. The Audit & Supervisory Board establishes audit plans and policies, in accordance with which each audit & supervisory board member fulfills his role, as assigned by the Audit & Supervisory Board. Specifically, audit & supervisory board members attend important meetings including those of the Board of Directors, conduct hearings with the directors, Internal Auditing Department and other employees regarding their duties, inspect important authorization documents and visit major establishments to conduct audits. Audit & supervisory board members also receive reports from other members of the board regarding their audit status, and exchange information with the accounting auditor when required.

The section in charge of internal audits is the Internal Auditing Department, which surveys any problems and makes proposals on improvement to ensure proper and efficient business performance through audits, including on-site surveys, of our Group companies and other establishments. The department also collaborates with audit & supervisory board members and accounting auditors on an as-needed basis in the audits. The accounting audits and internal control audits to be conducted by accounting auditors are outsourced to KPMG AZSA LLC.

Ensuring Appropriateness of Financial Reporting

We have established the Financial Reporting Internal Control Committee, chaired by the President, and an organization to promote control in the Corporate Staff Group. Under their policy, guidance and support, we promote development and proper operation of the internal control system in each division and affiliate in accordance with the Financial Instruments and Exchange Act, as well as the assessment, audit criteria and enforcement criteria specified by the Financial Services Agency. Thus, we are committed to further improving the systems to ensure appropriateness of financial reporting. The Internal Auditing Department assesses the effectiveness of the internal control system of the whole group for each fiscal year. Based on the results of such assessment, the department is required to compile an internal control report to be submitted to the Financial Services Agency and obtain the approval of the Financial Reporting Internal Control Committee and the Board of Directors.

Risk Management

Basic Approach

The Sumitomo Electric Group identifies, analyzes and assesses business risks, which include the factors that prevent the implementation of its business activities or achievement of management goals and strategies, as well as the factors that potentially have adverse impact, and then seeks to reduce and minimize them at a reasonable cost and with reasonable efforts.

With respect to cross-sectional risks common to all divisions and affiliates in the Group, the relevant corporate staff divisions, as well as company-wide committees organized by officers in charge, identify, analyze and assess the risks according to their duties, and then take measures to mitigate them.

The divisions and sales and R&D groups individually identify, analyze and assess the risks associated with their business operations, and then take measures to reduce them.

Basic Policy of Risk Management

Risk management is performed based on the significance of the risks determined in consideration of the following issues:

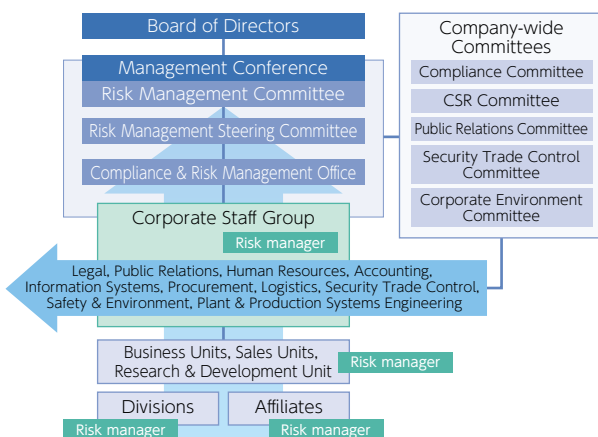
- Impact on business performance, maintenance of quality and safety
- Social responsibility to ensure stable supply
- Maintenance of favorable relations with stakeholders such as customers, suppliers, shareholders/investors, local communities and employees
- Continuous compliance with laws and corporate ethics
- Statements in the Sumitomo Spirit, the Sumitomo Electric Group Corporate Principles and the Sumitomo Electric Group Charter of Corporate Behavior

Risk Management System

The Sumitomo Electric Group holds a meeting of the Risk Management Committee, which controls overall risk management activities, in conjunction with a meeting of the management conference. The Risk Management Steering Committee is responsible for actual implementation under the Risk Management Committee, and its tasks include formulation of risk management policies, establishment of task forces at the time of an emergency, collection of information and planning and implementation of risk management education.

The Compliance & Risk Management Office serves as the organizer for these committees.

Risk Management System



Risk Management Activities

Risk management activities of the Sumitomo Electric Group are based on taking inventory of risks that is conducted by each division and each affiliate. In the inventory, which is conducted annually, the significance of each of the risk items is determined by scoring its severity, frequency of occurrence and other factors. Measures to deal with any significant risks are discussed and taken.

Annual results of the risk inventory are shared with executives and the corporate staff divisions. With mutual cooperation between them, group-wide risk management activities are promoted steadily.

《Creation and Management of a Risk Heat Map》

The Sumitomo Electric Group is making efforts to establish a more efficient mechanism for risk management so that it can respond to the expansion of the business fields and changes in the external environment effectively. We compiled a database of the results of risk inventory and information on the identified risks, as well as the results of operational audits and other monitoring activities, and created a risk heat map based on the database to visualize the risks to each of the divisions and affiliates. This map enables each of them to take measures to address the items with higher risk levels preferentially and enhance the efficiency and effectiveness of the risk management activities.

Initiatives for Business Continuity

《Business continuity in the event of a large-scale natural disaster》

Sumitomo Electric promotes business continuity management (BCM) for continuous improvement of Business Continuity Plans (BCPs) in Japan and overseas to ensure that our important businesses can be continued even in the event of a large-scale natural disaster, such as an earthquake, and that we can swiftly resume operations when our operations are interrupted. We review the BCPs periodically, verify the effectiveness of the emergency response plan and take inventory of supply chain risks every fiscal year.

Moreover, to further enhance the effectiveness of the BCPs, we provide BCP training to risk managers once a year to reinforce our business continuity capabilities.

《Business continuity in the event of an infectious disease outbreak》

The Sumitomo Electric Group formulated the guidelines for action plans to address new influenza in 2008. Each of the divisions and Group companies in Japan has established a BCP for infectious diseases and promoted the establishment of a crisis management system.

Amid the COVID-19 pandemic, we continued operation while thoroughly taking measures to prevent the spread of infection including the active use of homeworking and other styles of teleworking. Our manufacturing divisions have also maintained operation while making utmost efforts to ensure that 3Cs (closed spaces, crowded places and close-contact settings) are avoided in the operation and giving the top priority to the health and safety of employees.

Based on the knowledge acquired from the COVID-19 pandemic, we will further enhance the effectiveness of BCPs for coping with infectious diseases and also promote the development of BCPs in the overseas subsidiaries to further reinforce our business continuity capabilities.

《Continuous Implementation of Group-wide Joint Emergency Drills》

The Sumitomo Electric Group enhances disaster awareness of employees by implementing joint emergency drills to conduct the drills in Group companies at the same time twice a year (in the daytime and at night). Our production facilities carry out

evacuation drills as well as inspection of places where hazardous materials are used and simulation of the initial response to emergency situations. In the meantime, drills of information transmission and sharing are also implemented by establishing headquarters of countermeasures with the aims of grasping disaster information promptly, reporting it accurately and promptly to executives and sharing the information among the Group.

Protection of Personal Information, and Information Security

The Sumitomo Electric Group continuously improves the information management system and revises rules to enhance the mechanism that prevents information leakage in each of its divisions and affiliates. Regarding the use of social media, we have also established a social media policy, which specifies our basic approach to its use, as well as social media guidelines, which provide specific issues to be noted. The policy and guidelines serve to raise the awareness of employees. We will continue to promote information management of the Group by improving the system in domestic and overseas affiliates and enhancing the internal training program designed for disseminating the rules.

《Protection of Personal Information》

The Sumitomo Electric Group possesses personal information of more than 200,000 Group employees in Japan and abroad. It is increasingly becoming important to manage personal information partly due to the global trend to tighten the relevant regulations such as the EU General Data Protection Regulation (GDPR). To keep private information and proprietary information confidential, we are taking utmost measures such as the formulation and announcement of our Personal Information Protection Policy, the development and dissemination of internal rules, the conclusion of contracts with the recipients of information, the strengthening of information security (encryption, etc.) and the development of a system to report infection with computer viruses, loss of a cellular phone, etc.

《Strengthening of Information Security Measures》

We have set up an ICT Management Committee in the five countries of China, Thailand, Indonesia, Malaysia and the United States as the basis of our global expansion, and worked to enhance information security measures through the Committee. This commitment, which is in its seventh year, has led to such results as the reduction of the risk of infection by computer viruses and the implementation of information security training.

As measures to prevent the leakage of information on trade secrets and other important management assets, we have introduced AI-based anti-malware software to enhance protection from unknown malware and a mechanism for the detection of any illicit acts using log information of servers and network devices, in addition to conventionally used antivirus software and intrusion prevention systems (IPS). In the meantime, while cloud services are offered online these days and they are convenient, their use involves a concern about information leakage as a new risk. We have set up a system to assess the services before the introduction.

With respect to the corporate structure, we have established a communication and response system, with SEI-CSIRT (Computer Security Incident Response Team) playing a central role, to promptly identify and respond to any incidents relating to information security in our Group companies.

Security Trade Control

Sumitomo Electric has set forth internal rules on security trade control to ensure compliance with export control regulations aimed at international security, and established an export control system headed by a representative director. Our export activities are conducted after proper screening of individual business transactions and obtainment of necessary export licenses such as comprehensive export license. Our employees and persons concerned are provided with position-based training, as well as periodical training, which deals with the latest cases, and training at the time of their appointment to the position, so that they are aware of their responsibility for security trade control and obtain necessary knowledge. We also conduct audits in the Company and its affiliates in Japan and overseas constantly to monitor export activities, and share information between different divisions within the Company and between affiliates through various committees to reduce the risks in the security trade control activities of the entire group.

Record of Various Training Sessions in FY2019

Target of the training	No. of sessions	Persons who need to receive the training	No. of participants	Achievement rate	Main content
Staff in charge of classification	19	150	150	100%	Tasks on how to classify goods and technologies
Export control sections	33	1,247	1,247	100%	Export control practice
General employees (e-learning)	—	approx. 8,960	6,530	74%	Outline of export control and internal rules
Domestic affiliates	4	24	23 companies (82 persons)	96%	Outline of export control
Overseas affiliates	—	Responsible persons 134 Working staff —	63 165	47% —	Outline of export control and issues to be noted in foreign countries

Respect for and Protection of Intellectual Property

Sumitomo Electric respects intellectual property rights (IPRs). With the recognition that they are an important issue for our business management, we are actively committed to the appropriate management of technical know-how and internal data as well as enhancement and use of IPRs such as patent rights and design rights. At the same time, we respect the IPRs and trade secrets of others and strive to pay scrupulous attention to them.

To set up a structure for the commitment, we have developed a rule on the handling of intellectual property and trade secrets, and established an organization in the Intellectual Property Department to provide business units and R&D units in the Sumitomo Electric Group with the necessary support, such as management of inventions, investigation of prior arts and IPRs of other companies, promotion of technology standardization activities, and formulation of strategy and response from the perspective of intellectual property-related laws and regulations. Furthermore, at IP strategy meetings, strategic IP committee members of business units and development units plan and implement activities, verify the progress and results, and correct any inappropriate points. The activities are promoted through concerted efforts among respective divisions, R&D units and the Intellectual Property Department based on the PDCA (plan-do-check-act) cycle.

To promote and improve the IP activities, we operate an invention reward program, organize IP training sessions that match the experience and level of proficiency of each employee, and publish related in-house newsletters. We also hold an Intellectual Property Right and Standardization Convention every year to commend excellent IP activities and share knowledge. Through these efforts, we work to increase the value of intellectual property in the Group and promote the generation of business opportunities and the reduction of IP risks.

Compliance

Efforts to Pursue Fair Business Activities Worthy of Society's Trust

The Sumitomo Electric Group believes that compliance, which represents both complying with laws and regulations and acting in accordance with corporate ethics, comprises the backbone of its management and forms the absolute basis for its continued existence and development. In light of the recent trend of various compliance items, including competition laws, prevention of bribery, trade control rules and quality data issues, and under the principles of the Sumitomo Spirit, which values doing your sincere best not only in business but also every aspect of your life, placing prime importance on integrity and sound management and not pursuing immoral business, we will continue to make all efforts to ensure that all corporate activities are conducted fairly and honestly and can be trusted by society.

Organization That Supports Compliance and Its Structure

《 Compliance Committee 》

Sumitomo Electric Group has established the Compliance Committee, chaired by the President, as an organization that designs and promotes measures necessary to develop and further strengthen the compliance system and holds its meeting roughly four times a year. The Committee engages in various activities, including identification and analysis of group-wide and overall compliance risks, monitoring of the implementation of programs for the compliance items and interviews with divisions and Group companies concerning their activities to comply with laws. Compliance & Risk Management Office and Legal Department serve as the organizers of the Committee.

Structure of the Compliance Committee

Chairperson: President	
Vice Chairperson: Senior Managing Director	
Committee members: Senior Managing Director (1 person) Managing Director (1 person) General Manager of Compliance & Risk Management Office General Manager of Legal Department General Manager of Human Resources Division General Manager of Internal Auditing Department	Attendants: Audit & Supervisory Board Member General Manager of Office of Audit & Supervisory Board Members Organizer: Compliance & Risk Management Office Legal Department

《 Compliance & Risk Management Office 》

While planning and coordinating overall compliance activities in the Sumitomo Electric Group, Compliance & Risk Management Office plans and implements relevant activities including the development of a system and organization of training for compliance with competition laws and prevention of bribery. The office also operates the whistle-blowing system (Speak-Up System) of the Group. Led by the General Manager, the office is composed of members including employees from Corporate Staff Group such as Legal Department, Human Resources Division and Internal Auditing Department as well as persons in charge of compliance tasks in Business Units and Sales Units. The responsible persons for compliance activities at overseas legal and compliance bases concurrently serve as the members as well. A compliance meeting is held every month to share relevant information

and monitor the progress of compliance activities. Sales Units and Automotive Business Unit respectively have an internal organization dedicated to compliance (Sales Compliance Office and Automotive Compliance Office).

《 Compliance Steering Committee 》

At present, our legal bases are composed of more than 70 members in Japan, China, Thailand, Vietnam, the UK, Germany and the US. They are brought together from around the world to hold a periodical meeting of the Compliance Steering Committee (CSC) roughly twice a year. At the CSC meeting, the members discuss various issues related to compliance from a global perspective and determine the direction of the activities, the work schedule and other matters to disseminate best practices in the world across the Sumitomo Electric Group.



Compliance Steering Committee

Michael L. Whitlock
 Assistant General Counsel
 Legal Department
 Sumitomo Electric U.S.A. Holdings, Inc.

I am responsible for supporting compliance program in the Group companies in the Americas including the US, Mexico, Canada, Brazil and Paraguay. The legal base covering the Americas, to which I belong, is located in Torrance, California. I handle the daily compliance inquiries, oversee consultation and reporting in the Speak-Up System, from Group companies in the Americas and also provide training for the companies. In addition, I review the compliance structure of the Sumitomo Electric Group and its long-term strategy for compliance at the Compliance Steering Committee (CSC). CSC meetings provide the members of the Group's legal bases with precious opportunities to meet each other face-to-face and coordinate their global compliance activities. In April this year, we held an online CSC meeting due to the COVID-19 pandemic and I reported the guidelines of Global Antitrust and Competition Policy, non-poach agreement enforcement and other items. These jobs are challenging, but I always put forth my best effort while keeping the Sumitomo Spirit in mind.



Screenshot of the online CSC meeting

Compliance Activities

《 Code of Conduct 》

The Compliance Committee established and issued Code of Conduct, which serves as guidelines setting out the standards of conduct expected of each of us and helping us conduct business with integrity, based on the Sumitomo Spirit with the approval of the Board of Directors in April 2018. The Code of Conduct is basic rules on compliance commonly applied to all Group companies across the world. In addition to legal compliance, it specifies the basic policy on fair competition,

prevention of bribery, protection of confidential information and intellectual property, respect for human rights, environmental conservation and other issues. Printed booklets are prepared in approximately 30 languages, including Japanese, English and Chinese, and distributed to officers and employees in our Group while the multilingual versions are also posted in all of the languages on our website and intranet. Moreover, to inform employees of the Code of Conduct, we prepare summary posters in about 30 languages and display them in the offices and plants of relevant bases in our Group companies around the world.



Code of Conduct

《 Compliance Education 》

To check compliance risks, ensure implementation of preventive measures and develop and enhance awareness of compliance, the Compliance Committee organizes regular training seminars for officers and managers every year. New employees and newly promoted personnel are also provided with position-based training seminars. In addition, we launched an e-learning system that enables compliance training to be given online in fiscal 2019 and the program will be offered in 26 languages to our Group companies across the world. (It was available for approximately 18,500 persons as of the end of fiscal 2019). The subjects selected for the training program include the Code of Conduct, compliance with competition laws, prevention of bribery and prevention of quality data falsification and other items that are considered to be necessary and important for business operations in the Sumitomo Electric Group. We also disseminate the Speak-Up System mentioned below in the training seminars.



Compliance training

Targets of the Training and Number of Attendants (Period)

Target of the training	Number of attendants (period)
Officers (including executive officers)	43 (Dec. 2019)
Newly promoted personnel	approx. 400 (Feb. 2020)
New employees of Sumitomo Electric	approx. 240 (Apr. 2019)
Managers of Sumitomo Electric and its subsidiaries in Japan	approx. 6,500 (Apr. - Jul. 2019)

《 Speak-Up System 》

The Sumitomo Electric Group established the Speak-Up System as a system to identify any compliance-related issues at an early stage and resolve them by ourselves in a prompt and proper manner. Specifically, we set up contacts for consultation and reporting not only internally but also externally (by appointing a specialized service provider and a law firm), and the issues reported through this system are addressed with immediate investigation to take corrective action and prevent recurrence where necessary. The contacts for consultation and reporting have been established to allow any employees of Group companies in and out of Japan as well as other interested persons to access. We present the outline of the system at the time of various internal training sessions and also disseminate it through monthly in-house

newsletters, Code of Conduct, our website, intranet, workplace posters, notice to business partners and other measures. We established an external contact for consultation and reporting that can be used commonly by our Group companies worldwide (in about 30 languages 24 hours a day, 365 days a year) in 2014, and replaced the service provider to the largest company in the industry in 2019. As a result of our active efforts to disseminate the system, the number of consultations and reports continues to increase year by year, helping to eliminate inappropriate actions and circumstances.

Number of Consultations at the Contacts of the Group-wide System

FY	In-house contacts	External contacts	Total
2016	11	54	65
2017	24	50	74
2018	31	63	94
2019	25	94	119

※Note that consultations were also requested at contacts established individually by Group companies in addition to the consultations above.

Priority Matters

《 Compliance with Competition Laws 》

The Sumitomo Electric Group prioritizes global competition law compliance as the most important compliance activity and has taken measures to eliminate, and prevent a recurrence of, cartel and collusion including suspicious acts within the Group. These measures include the formulation of the Rules for Compliance with Competition Laws in June 2010, which contain a provision that restricts contact with competitors only in the cases with legitimate business reasons, and mandatory compliance training (including e-learning training) organized for sales staff and other employees around the world. In fiscal 2019, we also adopted Global Antitrust and Competition Policy, and promoted e-learning training on competition laws, which was launched in 2014 and now provided for the fourth time, for our Group employees all over the world.

《 Prevention of Bribery 》

The Sumitomo Electric Group introduced an anti-bribery program in April 2013 to enhance its anti-bribery compliance system and has developed it on a global scale. In response to the recent tightening of anti-bribery regulations on domestic and foreign public officials in the US, Europe and emerging markets, this program has established anti-bribery rules, including the prohibition against bribery and prior approval and ex-post report on gifts, hospitality and donations. It also requested each division and each Group company to appoint a bribery prevention manager to implement the rules. Five years have passed since the anti-bribery program started. Based on environmental changes during that period, we revised it in January 2018 to focus on high risk in giving inappropriate hospitality. We have also distributed a bribery prevention manual to the bribery prevention managers, who are in charge of the operation of the program, and provided them with detailed training. We will keep working to maintain and enhance the global bribery prevention system through collection and dissemination of relevant information, as well as monitoring (including the check of agents and other interested persons outside the Company), improvement of the program and the operation manual, training and other activities.

Respect for Human Rights

Establishment of the Sumitomo Electric Group Policy on Human Rights

Based on the Sumitomo Spirit, the Sumitomo Electric Group Corporate Principles and the Sumitomo Electric Group Charter of Corporate Behavior, we have been promoting initiatives to ensure respect for human rights including efforts to eliminate discrimination. The Sumitomo Electric Group Code of Conduct also sets a standard that guarantees respect for human rights and prohibits any form of discrimination or harassment. In March 2019, the Sumitomo Electric Group Policy on Human Rights was established to

respond to the various needs of our stakeholders and to clearly show our commitment to respecting human rights in conformance with international standards.

To ensure that our initiatives are promoted in line with this policy, we will implement training programs to educate employees about human rights and conduct fact-finding investigations regularly at relevant stakeholders, including domestic and overseas affiliates and business partners, while setting specific operational guidelines, etc. as necessary.

The Sumitomo Electric Group Policy on Human Rights*

Date of establishment: March 19, 2019

The Sumitomo Electric Group, in accordance with the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles, shall strive to be a group of companies worthy of society's trust by conducting business activities in an honest manner.

As we continue to develop together with the global community, the Sumitomo Electric Group recognizes that all of its business activities must be based on respect for human rights. The Sumitomo Electric Group will work ethically and responsibly for the respect of human rights ensuring that our entire group will uphold this standard.

1. Stance

The Sumitomo Electric Group hereby sets "The Sumitomo Electric Group Policy on Human Rights" (hereinafter referred to as "the Policy") to promote initiatives for respect to human rights. The Policy shall be guided by the following documents: "International Bill of Human Rights" (the Universal Declaration of Human Rights and the International Covenants on Human Rights) that sets forth fundamental human rights to be enjoyed by all people in the world; the "ILO Declaration on Fundamental Principles and Rights at Work" set forth by the International Labour Organization (ILO) which stipulates basic rights at work i.e. freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labour, the abolition of child labour and the elimination of discrimination in respect of employment and occupation; and the "Guiding Principles on Business and Human Rights" of the United Nations. The Policy represents the Sumitomo Electric Group's commitment to respecting human rights based on The Sumitomo Spirit and The Sumitomo Electric Group Corporate Principles as described in the Code of Conduct.

2. Scope of Application

The Policy will apply to all executives and employees of the Sumitomo Electric Group (all employees including executives, permanent employees and contract employees.) The Sumitomo Electric Group also expects all business partners related to its business activities to comply with the Policy.

3. Responsibility to Respect Human Rights

The Sumitomo Electric Group will aim to fulfil its responsibilities by ensuring that its business activities respect and enhance human rights. In the event our

business activities should make any adverse impact on human rights, it shall be handled appropriately for correction. Furthermore, we expect our business partners and stakeholders to respect the same standards of human rights as the Sumitomo Electric Group, to prevent violation and correct any breaches.

① Human Rights Due Diligence

To fulfill our responsibilities in regard to respect for human rights, the Sumitomo Electric Group will establish a system of human rights due diligence through the implementation of "Guiding Principles on Business and Human Rights" of the United Nations, and implement this in an ongoing manner. Human rights due diligence includes specifying and evaluating negative impacts imposed potentially or actually and taking measures to prevent or mitigate such risks.

② Remedy

In the event the Sumitomo Electric Group's business activities result in violation of human rights or it becomes clear that it was involved in making such adverse impact, we will provide for an appropriate remedy.

③ Training and Education

The Sumitomo Electric Group will provide appropriate training and education to its executives and employees.

④ Compliance with Applicable Laws and Regulations

The Sumitomo Electric Group will comply with the laws and regulations of all countries where it conducts its business activities. In the event that we face contradiction between internationally recognized human rights standards and the laws of the relevant country, the Sumitomo Electric Group will pursue ways to honor the principles of internationally recognized human rights.

⑤ Dialogue and Consultation

The Sumitomo Electric Group, in various efforts under the Policy, will make use of the independent and external expertise concerning human rights and will engage sincerely in holding dialogues and consultation with the stakeholders.

⑥ Information Disclosure

The Sumitomo Electric Group will disclose the progress of the initiatives regarding human rights based on the Policy on its website and reports.



*This policy is posted on our website.

<https://global-sei.com/csr/sociality/office.html>

《 Issuance of a detailed regulation on the employment of migrant workers 》

Based on the Sumitomo Electric Group Policy on Human Rights, we issued in October 2019 a detailed regulation that specifies the effective rules to be applied when our Group companies employ migrant workers.

When a company recruits migrant workers, the process involves various recruitment agents beyond national borders. In recent years, media and NGOs have reported on the exploitation of migrant workers, which is sometimes out of sight of the recruiting companies. To prevent such a situation, a comprehensive program has been developed with this detailed regulation, including periodical audits of recruitment agents, interviews with the workers and organization of contact points to handle complaints.

Through these initiatives, we will make continuous efforts to monitor the activities of the Sumitomo Electric Group and the recruitment agents and confirm their appropriateness so that we can perform more transparent business activities and continue to grow with society.

《 Human Rights Education and Training 》

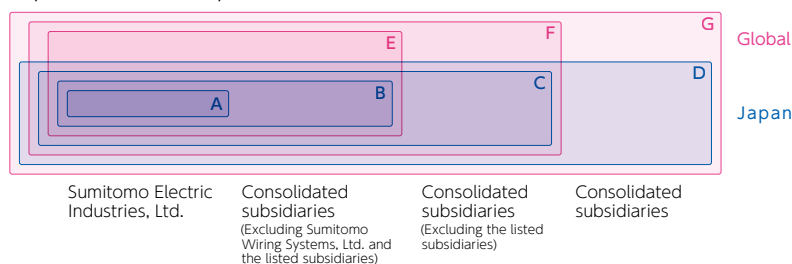
We are also making continuous efforts for human rights training and enlightenment to solve a wide range of human

rights issues including discrimination and sexual harassment. In 2019, a total of 12,241 persons participated in the human rights-related seminars, including the education provided mainly by Human Rights Task Committee members at their worksites as well as harassment prevention training for all managers, and human rights training for officers, new employees and newly promoted employees in each position.

《 Establishment of Consultation Services 》

We have set up two consultation services regarding human rights. One is supervised by the Compliance Committee and intended to support employees with focus on laws and regulations in general. Another is managed by the Human Resources (HR) Division and deals with various kinds of harassment in working environments such as sexual harassment, pregnancy discrimination and abuses of authorities. With these services, Sumitomo Electric has in place a system to quickly gather information on any violation of human rights and take appropriate measures against them.

■ Symbols in the boundary column



ESG Data

Social								
Indicator	Detailed category	Boundary	Unit	FY2017	FY2018	FY2019		
Quality								
Quality control	No. of complaints (results in FY2012 = 100)	E	%	68.1	66.4	56.5		
Supply chain								
CSR procurement	Cumulative percentage of implementation	C	%	90	90	90		
	No. of companies surveyed		companies	778	603	380		
	No. of companies interviewed/inspected on site		companies	86	86	37		
Human resources								
Employment	No. of global employees	G + employees on loan from other companies	Persons	255,133	272,796	283,910		
			Male	Persons	121,404	129,063	135,513	
				Persons	133,729	143,733	148,397	
			Female	Persons	39,637	40,231	42,418	
				Persons	32,201	32,488	33,798	
			Overseas	Persons	7,436	7,743	8,620	
				Persons	215,496	232,565	241,492	
			Americas	Persons	38,923	40,531	43,253	
				Persons	60,537	65,747	75,415	
				Persons	71,529	79,245	79,623	
			Southeast Asia	Persons	44,507	47,042	43,201	
				Persons	13,343	13,397	14,244	
				Persons	11,872	11,805	12,527	
			China	Persons	1,471	1,592	1,717	
				Persons	11,200	11,338	11,393	
			Managers	No. of employees in Sumitomo Electric	A + employees on loan to other companies	Persons	9,749	9,783
Persons	1,451	1,555				1,616		
Persons								

Indicator		Detailed category	Boundary	Unit	FY2017	FY2018	FY2019
Diversity	Group Global Executive Personnel (as of April 1 of the following year)		F	Persons	35	41	43
	Ratio of global employees (Sumitomo Electric)		A	%	2.7	9.2	10.3
	New graduates for main career track			Persons	185	196	213
	Global employees among them			Persons	5	18	22
	Women's empowerment		D + employees on loan to other companies				
	Share of women in management positions			%	2.2	2.6	3.1
	Female managers			Persons	172	199	266
	General managers or higher positions among them			Persons	26	29	33
	Section managers among them			Persons	146	170	233
	Ratio of women in the employees hired as new graduates		A	%	22.4	21.5	20.0
Female employees hired		Persons		94	113	110	
Turnover rate (ratio of the employees who were hired as new graduates three years before the relevant year and have left the company within three years)		A	%	7.9	9.3	10.1	
Employment rate of the physically or mentally disabled (as of June 15 of the following year)		A + qualified Group companies	%	2.29	2.29	2.36	
Safe and sound workplace	Average total working hour		A + employees on loan to affiliates within the Works	hours	1,999	1,988	1,970
	Average overtime hours			hours/month	19.3	18.7	17.5
	Average number of paid holidays taken by employees			days/year	16.0	16.5	16.9
	Number of Users of the Employee Support Programs		A + employees on loan to other companies				<input checked="" type="checkbox"/>
	Employees who took childcare leave			Persons	157	154	226
	Male			Persons	52	46	119
	Female			Persons	105	108	107
	Employees who took leave when their spouses gave birth			Persons	112	121	141
	Employees who used the short-time work system			Persons	282	287	287
	Male			Persons	19	19	29
	Female			Persons	263	268	258
	Enrollment in the reemployment system			Persons	23	28	24
	Male			Persons	0	4	4
	Female			Persons	23	24	20
	Users of internal child care centers			Persons	52	59	56
Users of the volunteer holiday system		Persons		6	5	5	
Users of the work from home arrangements		Persons		40	209	984	
Human resources development	Training sessions organized across the Sumitomo Electric Group			F			
	Total number of participants		Persons		90,038	97,025	91,533
	Sumitomo Electric		Persons		61,729	65,369	56,066
	Group companies in Japan		Persons		19,379	21,493	21,406
	Overseas Group companies		Persons		8,930	10,163	14,081
	Total length of training		hours		501,194	543,988	555,098
	Sumitomo Electric		hours		358,981	394,101	400,491
	Group companies in Japan		hours		79,389	94,607	91,047
	Overseas Group companies		hours		62,824	55,280	63,560
	Unique training sessions organized in individual Group companies						
	Total number of participants		Persons		121,534	182,195	225,699
	Group companies in Japan		Persons		25,548	34,228	32,901
Overseas Group companies		Persons	95,986	147,967	192,798		
Total length of training		hours	407,759	514,559	745,433		
Group companies in Japan		hours	161,735	184,009	171,665		
Overseas Group companies		hours	246,025	330,550	573,768		
Occupational health and safety	Occupational accidents		F + subcontractors	Persons	67	67	72
	Accidents resulting in lost work time			Persons	14	11	8
	No lost work time injuries			Persons	36	36	41
	Minor injuries			Persons	17	20	23
	Lost time injuries frequency rate for employees		B		0.13	0.11	0.03
Social contribution activities							
	Amount of donations for social contribution		A	thousand yen	259,941	376,689	319,951

Environment

Environment							
Indicator	Detailed category	Boundary	Unit	FY2017	FY2018	FY2019	
Prevention of global warming	Energy consumption		million MJ	27,786	28,177	27,506	
	Energy consumption per unit of sales		kl/100 million yen	31	30	31	
	GHG emissions	(Scope1)	F	thousand tons-CO ₂ e	202	209	197
		(Scope2)		thousand tons-CO ₂ e	1,373	1,332	1,176
		(Scope1+Scope2)		thousand tons-CO ₂ e	1,575	1,541	1,373
		Japan		thousand tons-CO ₂ e	727	708	627
		Asia		thousand tons-CO ₂ e	429	428	375
		China		thousand tons-CO ₂ e	220	210	187
		America		thousand tons-CO ₂ e	139	140	126
		Europe and others		thousand tons-CO ₂ e	60	56	57
		(Scope3)	F	thousand tons-CO ₂ e	3,150	8,272	6,921
		Category 1		thousand tons-CO ₂ e	2,255	2,442	2,398
		Category 2		thousand tons-CO ₂ e	519	538	583
		Category 3		thousand tons-CO ₂ e	213	262	249
		Category 4		thousand tons-CO ₂ e	37	38	36
Category 5	thousand tons-CO ₂ e	20		30	30		
	Category 6	thousand tons-CO ₂ e	33	35	37		
	Category 7	thousand tons-CO ₂ e	73	78	81		
	Category 11	thousand tons-CO ₂ e	—	4,848	3,507		
	CO ₂ emissions from transportation	E	tons-CO ₂	96,600	95,993	89,489	
	Per-unit CO ₂ emissions from transportation	E	tons-CO ₂ /million ton-km	97.2	101.2	99.5	
Resource conservation and recycling	Amount of waste	F	thousand tons	97.1	91.1	77.3	
			In Japan	thousand tons	39.5	37.8	31.1
			Overseas	thousand tons	57.6	53.3	46.2
	Zero emission rate	In Japan	%	0.22	0.76	0.54	
		Overseas	%	12.8	9.4	12.7	
Harmful chemical substances	Chemical substances specified in the PRTR Law	C	Release	t	51.7	38.8	32.5
			Transfer	t	133.2	123.0	100.0
Environmentally conscious products	Eco-products	F	thousand tons-CO ₂ e	126	131	144	
	Contribution to the reduction of CO ₂ emissions		%	61	61	64	
	Percentage in sales						
Water risks	Water withdrawal	F	thousand m ³	14,601	14,260	13,775	
			In Japan	thousand m ³	6,227	6,156	5,935
			Overseas	thousand m ³	8,374	8,104	7,840
Environmental management	Non-compliance with environmental laws and ordinances	F	cases	0	5	2	

Governance

(At the close of the Ordinary General Meeting of Shareholders in the following year)

Governance							
Indicator	Detailed category	Boundary	Unit	FY2017	FY2018	FY2019	
Board of Directors	No. of directors	A	Persons	13	13	12	
			Inside	Persons	10	10	9
			Male	Persons	10	10	9
			Female	Persons	0	0	0
			Outside	Persons	3	3	3
			Male	Persons	2	2	2
			Female	Persons	1	1	1
Audit & Supervisory Board	No. of audit & supervisory board members	A	Persons	5	5	5	
			Inside	Persons	2	2	2
			Male	Persons	2	2	2
			Female	Persons	0	0	0
			Outside	Persons	3	3	3
			Male	Persons	2	2	2
			Female	Persons	1	1	1



Independent Assurance Report

To the President & COO of Sumitomo Electric Industries, Ltd.

We were engaged by Sumitomo Electric Industries, Ltd. (the “Company”) to undertake a limited assurance engagement of the environmental and social performance indicators marked with “” (the “Indicators”) for the period from April 1, 2019 to March 31, 2020 with the exception of the “Employment Rate of the Physically or Mentally Disabled” which is as of June 15, 2020, included in its CSR Report 2020 (the “Report”) for the fiscal year ended March 31, 2020.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the “Company’s reporting criteria”), as described in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the ‘International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information’ and the ‘ISAE 3410, Assurance Engagements on Greenhouse Gas Statements’ issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company’s responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company’s reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company’s reporting criteria, and recalculating the Indicators.
- Making inquiries and reviewing materials including documented evidence of three of the factories of the Company selected on the basis of a risk analysis, as alternative procedures to site visits.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company’s reporting criteria as described in the Report.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

Osaka, Japan

November 11, 2020

Comments from an External Expert

My findings from CSR Report 2020 (hereinafter “this Report”) on the activities and efforts of Sumitomo Electric and its Group companies (hereinafter the “Sumitomo Electric Group”) to fulfill their social responsibility and disclose relevant information are as follows:

I hope that roadmaps for contributions toward the future will be disclosed

The Top Message mentions that this Report introduces examples of the company’s products that support society and explains how they make social contribution as in the previous reports. I read the specific references to high-voltage DC cables, POREFLON™ membrane and rectangular magnet wires, as well as the combination of the concentrator photovoltaic systems and redox flow batteries, with interest. I also found the strength of the Company in the statement “While our products contribute to society as parts and their contribution is low-key, we consider that we are expanding the fields where we make a steady and reliable contribution to society.”

While P22 has a statement that the Sumitomo Electric Group has specified three forms of the ideal society it seeks, as well as nine fields for its initiatives to offer values for the society, I would like to ask that the next report should also enhance the disclosure of the roadmaps drawn for the nine fields.

I have the impression that the CSR reports of the Sumitomo Electric Group tend to focus relatively more on the disclosure of past results on the whole. I hope that the report will mention what the Group plans to do proactively prior to changes in society more actively.

Introduction of examples that correspond to the Progressive Environment Innovation Strategy should also be considered

One of the reasons why I hope so is the fact that the Japanese government formulated a Progressive Environment Innovation Strategy in January 2020. With the recognition that the establishment of progressive technologies that can make the world carbon neutral requires the indication of the direction, namely what technologies and goals are sought under what system, this strategy specifies five fields including energy supply and demand and 16 common and important technical challenges, as well as 39 themes with potential to reduce a large amount of GHG emissions to which technologies in Japan may make a great contribution.

The 39 themes include the development of high-efficiency, low-cost power electronics technology. The strategy contains a statement that research and development will be conducted for the improvement of performance and cost reduction of power electronics technology that can significantly reduce the electricity loss caused by power conversion at the power generation,

transmission, distribution and consumption stages, aiming to disseminate the use of devices for new applications, etc. by 2050. The target of reducing CO₂ emissions by about 1.4 billion tons worldwide is also mentioned in the strategy.

I suggest that what the Sumitomo Electric Group can do and want to do to make contributions should be explained in this context. The strategy also refers to many other items closely related to the technical and product fields of the Sumitomo Electric Group, such as the expansion of the electrification of automobiles, aircraft, etc. (using high-performance storage batteries, etc.) and substantial improvement of the environmental performance, the establishment of hydrogen-fueled mobility such as fuel cell systems and hydrogen storage systems, the development of technologies for high-efficiency recycling of metal, etc. and the development of low-cost stationary fuel cells.

The improvement of the capacity of business continuity management and the enhancement of health and productivity management should be promoted on a global scale

Another issue that caught my attention in this Report was the strengthened commitment to improving the capacity of business continuity management and enhancing health and productivity management partly in response to the spread of COVID-19. Witnessing the global pandemic of the infectious disease, investors and asset management firms are trying to assess companies from a perspective of how they secure the safety and health of employees and their families. In March 2020, 195 institutional investors with a long-term perspective in the world released “Investor Statement on Coronavirus Response” to urge the investment targeted companies to place a higher priority on health and safety in their business management. In consideration of the fact that the Sumitomo Electric Group including the consolidated subsidiaries employs 280,000 people in total and 85% of them live outside Japan, I strongly hope that the Group will promote the improvement of the capacity of business continuity management and the enhancement of health and productivity management on a global scale.



Eiichiro Adachi
Counselor,
The Japan Research Institute, Limited

Sumitomo Electric’s Response to the Findings



Osamu Inoue
President

We thank Mr. Eiichiro Adachi for providing suggestive opinions on our CSR report.

Our group has developed a wide range of businesses and supported social and industrial infrastructure broadly although the fields do not attract much attention. In our mid-term management plan VISION 2022, we have specified the three forms of society expected in 2030 and nine fields for our initiatives to offer values for the society and are promoting activities for them.

We have made various contributions to the sustainability of society through, for example, the business related to high-voltage DC cables suitable for long-distance transmission of renewable energy, the aluminum wiring harness business that helps make vehicles lighter in weight and thereby reduce CO₂ emissions, the high-performance optical fiber business to underpin communication infrastructure, in which increases in the speed and capacity are in progress, and the electronic device business to form a basis for mobile, wireless and ultra-high-speed communications that support the era of 5G, although this report did not have enough space to explain them. Mr. Adachi put his hope on further possibilities of our group based on the examples mentioned in his findings, which has enhanced my awareness.

In the meantime, the COVID-19 pandemic made us acutely aware of the importance of efforts to address the health and safety, the work environment, human rights, diversity and other issues of Group employees in various parts of the world and their families, along with interested persons in our value chain. Our group will further promote measures to enhance the efforts, including work style reforms as well as initiatives to materialize the Policy on Human Rights because respect for human rights is essential for business development on a global scale.

While the unpredictable situation continues, our group will continue to make concerted efforts for medium- and long-term increases in the corporate value with the unwavering basic policy of contributing to society through fair business activities under the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles.

The Findings by an External Expert in this English version are a translation of the original text in the Japanese version.

Sumitomo Electric Industries, Ltd.

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