

# CSR Report 2018

## Editorial Policy

### Period Covered by This CSR Report

April 1, 2017 through March 31, 2018 (fiscal 2017).  
Some activities conducted in fiscal 2018 are also covered.

### Boundary of This CSR Report

Sumitomo Electric Industries, Ltd. and its consolidated subsidiaries (358 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. and Sumitomo Densetsu 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. CSR promotion activities conducted by our affiliates are introduced in P73 to 74.
- For details of the boundary of data collection for environmental indicators, see Explanation of the Boundary in P65.

### Guidelines Referenced

#### ■ GRI Standard

This report presents information on the standard disclosures.

The GRI Content Index is published on the following website:

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

#### ■ Environmental Reporting Guidelines 2012 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 2018

(Last CSR Report: published in November 2017; and next CSR Report: scheduled for release in November 2019)

CSR  
REPORT  
2018  
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## 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.

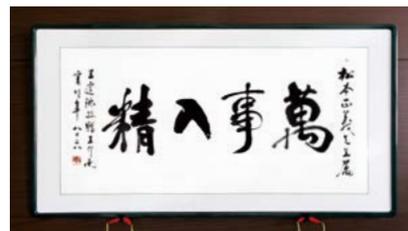
The Sumitomo Electric Group positions this "Banji-nissei" as the keyword representing the Sumitomo Spirit.



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.



We contribute to a better society  
by leveraging our expertise in  
connectivity and transmission technologies  
that we have developed  
since our foundation

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.

In fiscal 2017, which was my first year as the president as well as the final fiscal year for our mid-term management plan "VISION 2017," we achieved consolidated net sales of 3,082.2 billion yen, operating income of 173.1 billion yen and profit attributable to owners of the parent of 120.3 billion yen, which were all record highs. The factors contributing to this included strong demand for wiring harnesses, powder alloy and sintered parts with an increase in car production mainly outside Japan, as well as growth in demand for information and communication products such as optical

fibers and cables.

Despite the fact, we failed to reach the numerical targets set in the interim revision in fiscal 2015 except the one for ROE\*. By business segment, while most of the numerical targets were achieved in the three segments of Automotive, Infocommunications and Industrial Materials, the results were slightly below the targets in Environment & Energy and far below the targets in Electronics. Although we failed to reach the targets, the segments covered for each other to increase net sales by about 900 billion yen and operating income by about 100 billion yen over the five years from fiscal 2012, which was the concluding fiscal year for VISION 2012. I think that we have managed to show a steady growth even in the uncertain economic conditions.

## New Mid-term Management Plan "VISION 2022"

Our new mid-term management plan "VISION 2022" was launched in May 2018. The basic concept of VISION 2022 is to contribute to a better society with the concerted efforts of the entire Sumitomo Electric Group based on the connectivity and communications technologies that have been continuously cultivated by the Group for 120 years since its foundation. This idea has also been incorporated into our new tagline "Connect with Innovation." This tagline was generated with "Connect" representing our intent to strongly connect our business to society and stakeholders and with "Innovation" showing our commitment to responding to social changes by further evolving wide-ranging core technologies of our Group. With this tagline, we will strive for growth in the conventional fields of Mobility, Energy and Communications as well as for the creation of new products and services that support the development of a better society through innovation.

### Priority Initiatives

VISION 2022 has set three priority initiatives under the three bases of the Sumitomo Electric Group (manufacturing base, human resources and organizational base and financial base). The first initiative is "Enhancement of Manufacturing Capabilities." Each division of our Group is committed to strengthening SEQCDD\*, which are essential subjects for a manufacturing company, and the Manufacturing Management & Engineering Unit is now promoting cross-departmental activities throughout the Company. Our targets are the achievement of zero accident in people, goods and equipment to become a company with the highest level of safety in the world; development of "strong factories" through continuous improvement; and promotion of the sharing of best practices among Group companies to demonstrate our strength in an integrated manner.

The second is "Increasing Global Presence." We will further increase global transactions to gain a higher share and also aim to create innovative business models that anticipate market changes in the world.

The third is "Creation and Enhancement of Leading Technology." With our R&D Group playing a pivotal role, we will continue to enhance core technologies and combine them to propose superior solutions and strengthen the competitiveness of our existing business. In particular, the keys are the creation of innovation that anticipates changes in the automotive, energy and

information network fields and commercialization with agility, as well as the development of forward-looking innovative technologies.

### Deepening of CSR Commitment in an Environmental Context

In VISION 2022, the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles continue to serve as the basic value standards that guide us in our efforts to help make society "safe and secure," "environmentally friendly" and "comfortable and have much potential for growth." Especially in terms of contribution to environmental issues, in addition to energy saving in individual products, we will propose a power system that also addresses the management of renewable energy to facilitate the more widespread use of environment-friendly energy. A major problem in the world, particularly in Asia, is water pollution. We plan to introduce a water processing project based on the unique membrane technology of our Group into various parts of the world. These and various other values offered by our Group will correspond to the Sustainable Development Goals (SDGs) adopted at a UN summit in 2015, which are now widespread among companies.

### Deepening of CSR Commitment in a Social Context

Work style reforms have been recently recognized as a crucial issue throughout Japan. The Sumitomo Electric Group is likewise promoting the reduction of long working hours. For example, we set reduction of overtime work and encouragement of employees to take paid holidays as the targets and work to improve the productivity as an initiative to solve the root cause.

We also intend to become a company where employees can select a work style from among various options according to their own circumstances irrespective of gender or whether they have disabilities or not, by promoting diversity management that is more in tune with the times. In addition, we will enhance CSR procurement to establish a healthy partnership with suppliers.

"Glorious" of the "Glorious Excellent Company," which is our goal, represents an unchanging value for us as a corporate person. We will continuously strive to maintain such a state and work to fulfill our social responsibility with the unshakable principle that also corresponds to the ideas of compliance and CSR today.

# Mid-term Management Plan VISION 2022

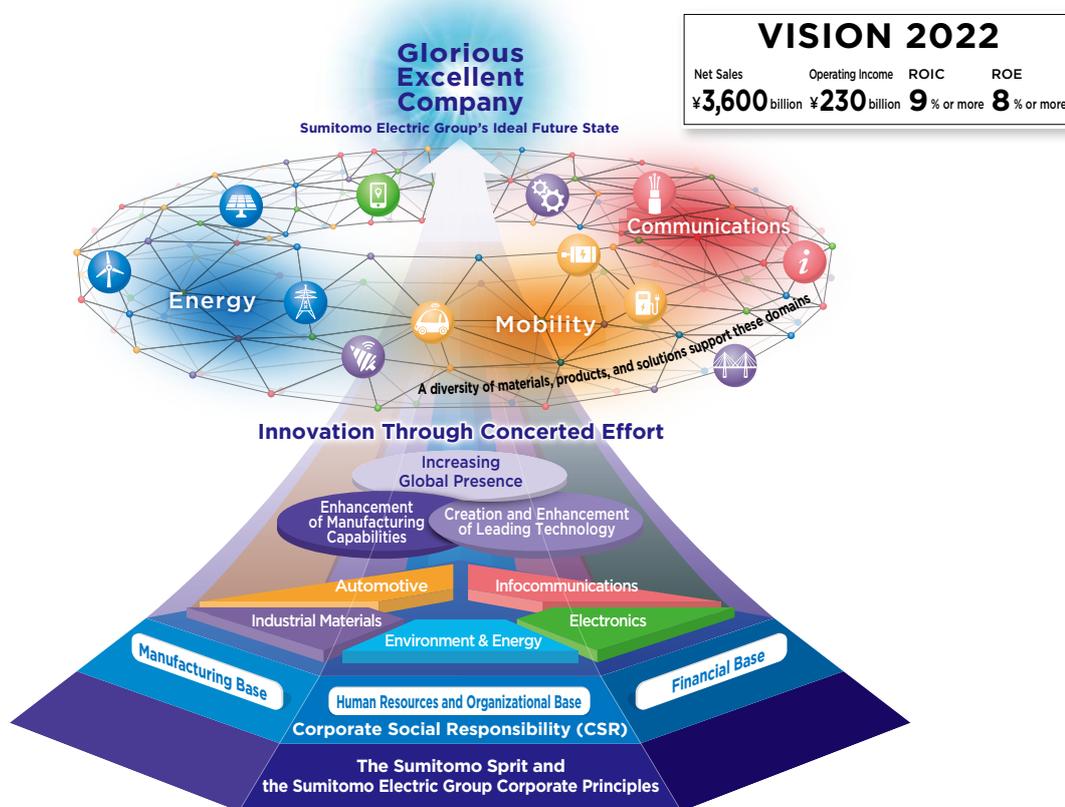
## Basic Concepts

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. With focuses on commitment to enhancing corporate values founded on the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles, we will fulfill our social responsibility through business activities.

While striving for the improvement of our Manufacturing Base, Human Resources and Organizational Base and Financial Base, as well as growth of our business in the five business segments of Automotive, Infocommunications, Electronics, Environment & Energy and Industrial Materials, we will be committed to enhancement of manufacturing capabilities, increasing global presence and creation and enhancement of leading technology.



## Growth Strategy

### Enhancement and Expansion of Five Business Segments

The Sumitomo Electric Group continues to strive for growth in five business segments focusing on Mobility, Energy and Communications fields as well as materials, products and solutions supporting these fields. We aim to grow every segment by strengthening revenue bases and improving capital efficiency and to achieve a balanced business portfolio.

### Further Growth Through Innovation

As exemplified by major innovation in the automobile industry, widespread use of renewable energy and effective use of big data, the markets surrounding the Sumitomo Electric Group are undergoing dramatic changes. While new social demand is created and new markets are growing, we will create innovation in a holistic approach based on the diversity in technologies and business expertise we have cultivated over the years, offering new technologies, products and services that help facilitate the realization of a better society.

## Targets

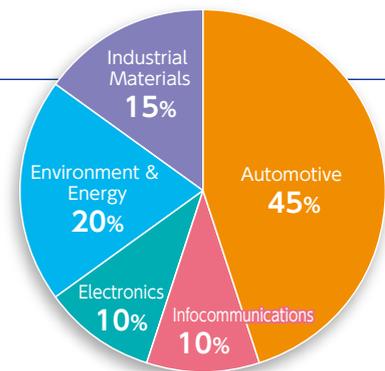
	FY2017 Result	FY2020 Interim Target	FY2022 Target
Net Sales	¥3,082 billion	<b>¥3,400 billion</b>	<b>¥3,600 billion</b>
Operating Income	¥173 billion	<b>¥200 billion</b>	<b>¥230 billion</b>
Operating Margin Ratio	5.6%	<b>5.9%</b>	<b>6.4%</b>
ROIC*	7.9%	<b>8.5% or more</b>	<b>9% or more</b>
ROE	8.1%	<b>8% or more</b>	<b>8% or more</b>
Capital investment (5-year cumulative amount)			<b>¥950 billion</b>
R&D expenditures (5-year cumulative amount)			<b>¥600 billion</b>

- We aim for a new-product sales ratio of 30%.
- We aim to keep our shareholders' equity ratio at 50%.
- We aim to maintain a stable dividend for shareholders and increase the dividend payout ratio to about 40% by the fiscal year 2022.

## Portfolio

Our target business portfolio in operating income to be achieved by fiscal 2022 is presented in the graph on the right.

We aim to grow the non-automotive segments at a higher rate so that they result in more than 50% of the entire portfolio while ensuring a growth in total profit level.



## 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

\* SEQCDD

**S** (Safety)  
**E** (Environment)  
**Q** (Quality)  
**C** (Cost)  
**D** (Delivery)  
**D** (Research & Development)

### 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

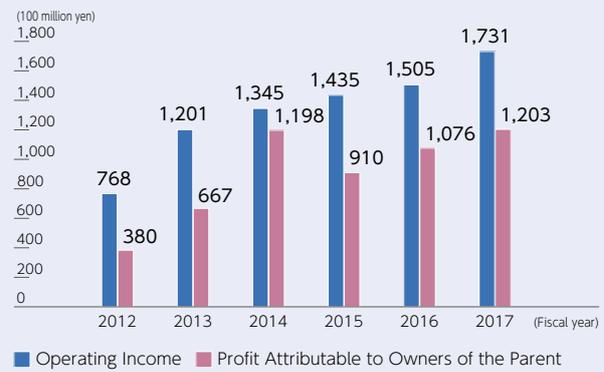
# Financial and Non-Financial Highlights

## Financial Overview

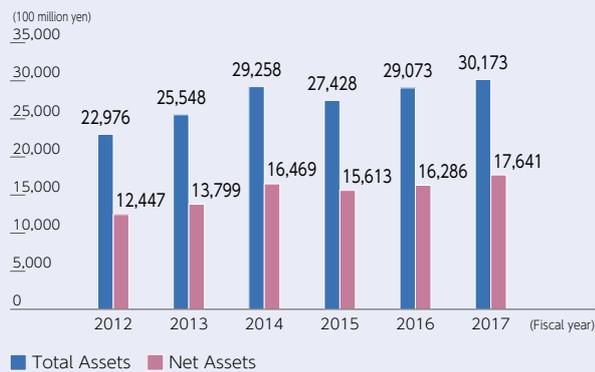
Sales in Japan and overseas and ratio of overseas sales by year



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



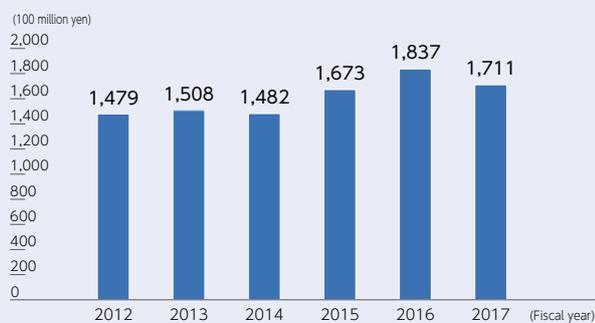
Total Assets and Net Assets (Consolidated)



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



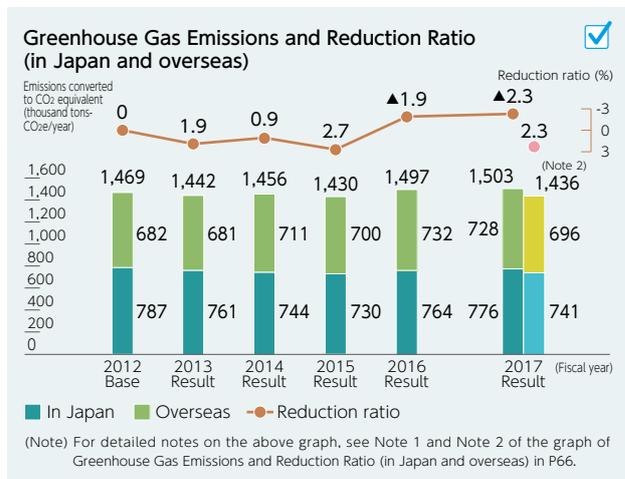
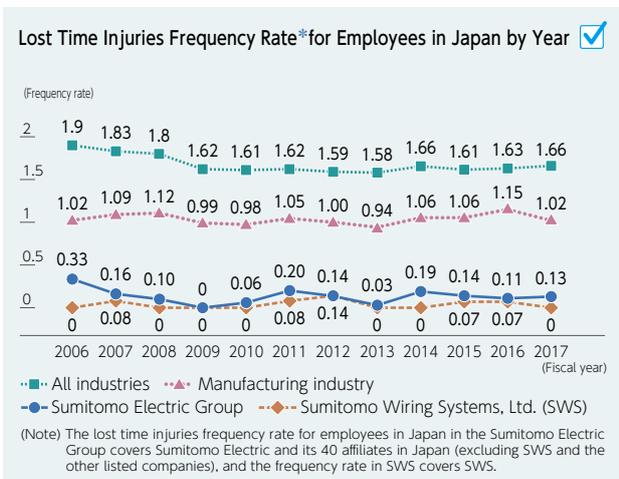
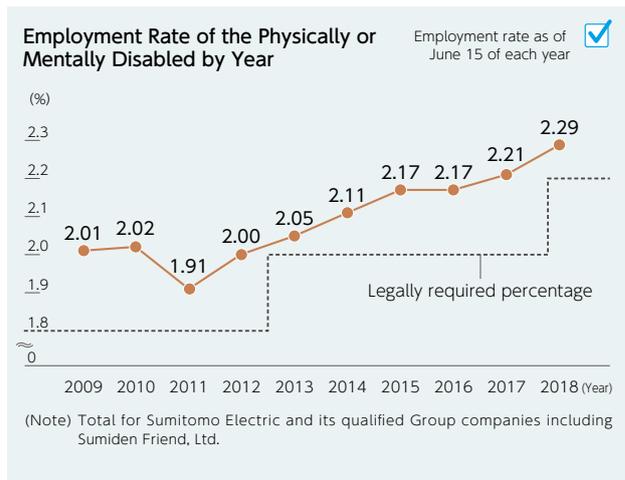
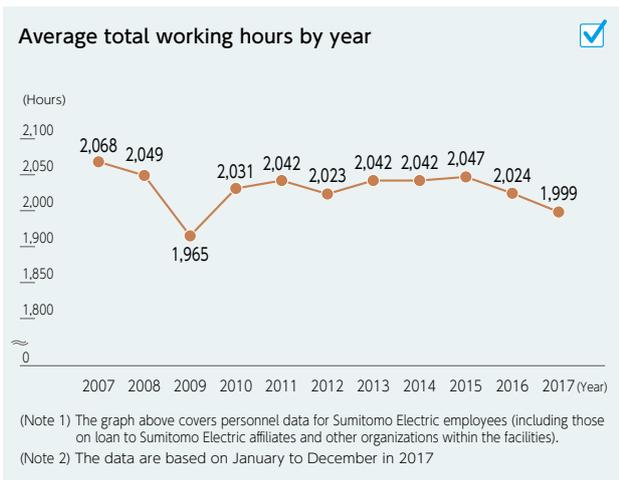
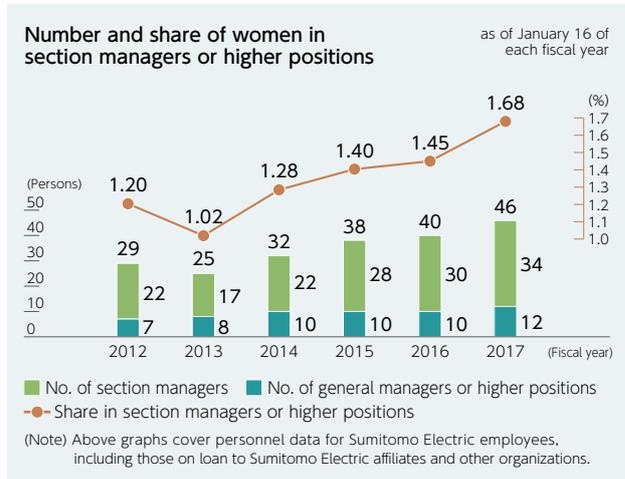
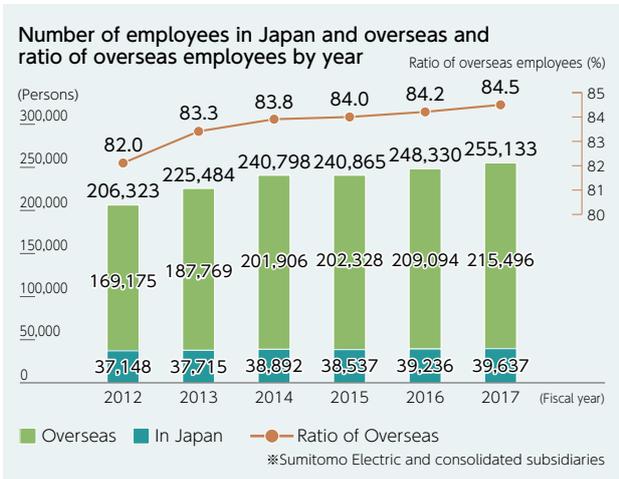
Capital investment



R&D expenditures



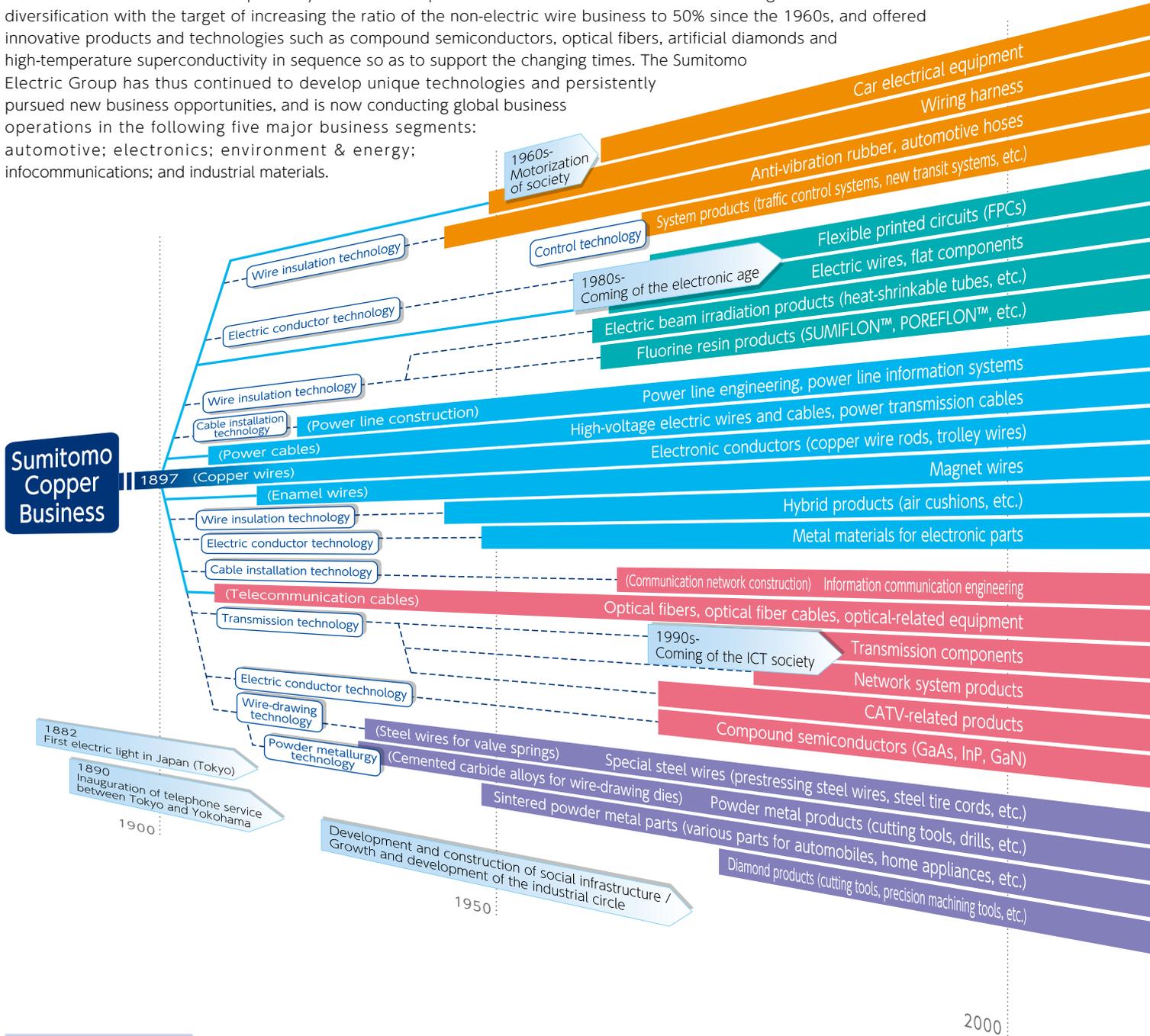
# Non-financial Overview



**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

- 1897 • Sumitomo Copper Rolling Works was founded.
- 1900 • Started production of coated wires.
- 1908 • Started production of power cables.
- 1909 • Started trial production of telecommunication cables.
- 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.
- 1916 • Opened a new factory (now the Osaka Works)  
Started production of enamel wires.
- 1920 • Incorporated Sumitomo Electric Wire & Cable Works as a limited company (the establishment of the Company).
- 1931 • Started production of cemented carbide ("IGETALLOY") tools.
- 1932 • Started production of special steel wires.

- 1939 • Company name changed to the current name, Sumitomo Electric Industries, Ltd.
- 1941 • Opened the Itami Works.
- 1943 • Started production of anti-vibration rubber and fuel tanks.
- 1946 • Opened a branch office in Tokyo (now the Tokyo Head Office).
- 1948 • Started marketing sintered powder metal products.
- 1949 • Entered into the business of construction of overhead transmission lines.
- 1957 • Delivered the first Japan-made television broadcasting antennas.
- 1961 • Opened the Yokohama Works.  
Delivered the wiring harnesses for four-wheel vehicles for the first time in its history.
- 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.
- 1963 • Started production of disc brakes.
- 1964 • Started production of electron beam irradiation wires.
- 1968 • Entered into the business of traffic control systems.
- 1969 • Established its first overseas production subsidiary.  
Started development of flexible printed circuits (FPCs).

## Automotive

### Responding to safety, amenity and environmental needs of future motorized society

With a focus on the interface between the vehicle and driver, Sumitomo Electric offers various products to the global market. A representative example of these products is a wiring harness that transmits electric power and information to various points in an automobile. Growing public demands for more eco-friendly vehicles require the supply of sophisticated hybrid and electric vehicle parts and ITS-related products based on a wide variety of advanced technologies. Keeping in mind "the next generation with harmony between vehicles and people," Sumitomo Electric will continue developing a variety of new automotive products in order to contribute to the creation of a comfortable automobile society.

## Electronics

### Supporting advancement in the functions and performance of electronics

In the electronics field, devices are required to be ever smaller, lighter, more functional, and more sophisticated. To meet these requirements, Sumitomo Electric has been expanding its product lineup by continuously developing new materials, wires and other parts. Sumitomo Electric's leading-edge Technologies have been employed effectively for advanced medical, automotive and aircraft equipment, as well as for widely used products such as smartphones and tablet PCs.

## Environment & Energy

### Supporting a stable energy supply

Since its establishment, Sumitomo Electric has made efforts to develop wire and cable technologies that are essential for ensuring a stable power supply. The Company is now moving toward new businesses in the field of renewable energy and smart grids to supply environmentally friendly and energy-efficient products to the global market, thereby contributing to upgrading social infrastructure.

## Infocommunications

### Supporting communications

Sumitomo Electric provides various solutions that make our society safer, more secure and more comfortable. A wide array of these solutions include optical fibers/cables and other telecommunication-related products necessary for FTTH and other optical network construction and access-based network products. We will continue to develop innovative technologies and products and supply them to customers, thereby contributing to the construction and upgrade of broadband network infrastructures.

## Industrial Materials

### Using a wide range of technologies for the prosperity of industrial society

Taking advantage of its material development capabilities based on electric wire/cable drawing technology, Sumitomo Electric has developed various products with unique features, including PC steel wires, steel tire cords, and other special steel wires essential for civil structure construction. The Company also supplies a wide variety of superior materials including sintered parts used in automobiles and household appliances and synthetic diamond called the ultimate material. Various products made from these sophisticated industrial materials support the bases of industries, thereby contributing to the development of society.

- 1970 • Started production of compound semiconductors.
- 1971 • Opened the Kanto Works.
- 1974 • Started production of optical fiber cables.
- 1975 • Contracted to construct a power transmission line in Iran.
- 1976 • Received an order for a large telecommunications network project in Nigeria.
- 1978 • Delivered and put into operation the world's first bi-directional fiber optic CATV system "Hi-OVIS."
- 1981 • Delivered the fiber optic LAN system for the first time in its history.
- 1982 • Succeeded in producing the world's largest synthetic monocrystalline diamonds (1.2 carats).
- 1996 • Developed a technology for producing long-length oxide high-temperature superconducting wires.
- 1998 • Developed and started marketing ecology wires and cables.
- 1999 • Sumitomo Electric Fine Polymer, Inc. (fine polymer products) started operation.
- 2001 • J-Power Systems Corporation (high-voltage power cables) started operation.
- 2002 • Sumitomo Electric Networks, Inc. (network equipment) started operation. Sumitomo (SEI) Steel Wire, Corp. (special metal wires) started operation. Sumitomo Electric Wintec, Inc. (magnet wires) started operation.

- 2003 • Sumiden Hitachi Cable Ltd. (wires and cables for buildings and industrial equipment) started operation. Sumitomo Electric Hardmetal Corp. (powder metal and diamond products) started operation.
- 2004 • A.L.M.T. Corp. was made a wholly-owned subsidiary.
- 2006 • The HTS cable used in a power transmission grid in the U.S. started supplying electricity.
- 2007 • Sumitomo Wiring Systems, Ltd. was made a wholly-owned subsidiary. Nissin Electric Co., Ltd. was made a consolidated subsidiary.
- 2008 • Opened the Technical Training Center. Sumiden Friend, Ltd. (Special subsidiary) started operation.
- 2009 • Sumitomo Electric Device Innovations, Inc. was organized.
- 2010 • Opened the WinD Lab, a new laboratory building. SEI Optifrontier Co., Ltd. was organized.
- 2014 • J-Power Systems Corporation was made a wholly-owned subsidiary.

# Automotive



Pipe-shielded wiring harnesses for HEVs



Anti-vibration rubber products



Charging connector for EVs

## ◆ VISION 2022 Mid-term Management Plan: Segment Strategy

### Ideal Future State

**Become a mega-supplier with the wiring harnesses business at the core.**



### Growth Strategy

- Promote “Concept-in Activities for Customers”
- Strengthen collaborative relationships with third parties (OEMs, the public sector, service providers, etc.)
- Strengthen our business base through the consolidation of the Group’s resources.
- Expand sales targeting global customers
- Generate new CASE\*-related products

\*CASE: A concept of connectivity, autonomous driving, shared services and electric mobility formulated in the automotive industry

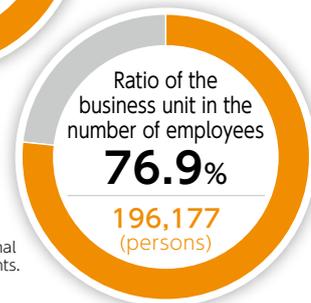


### State of the Market

- Continuously growing automotive sales worldwide
- Growth in eco-friendly vehicles in line with tightening environmental regulations (ZEV\*, CO<sub>2</sub> regulation, diesel bans)
- An auto industry revolution; accelerating improvement delivered by CASE
- Vendors from other industries entering the market, changing the supplier vantage-point

### Our Strengths

- Comprehensive and dominant market presence in the wiring harnesses business via the trinity system, comprising Sumitomo Electric, Sumitomo Wiring Systems and AutoNetworks Technologies
- Global business deployment (33 nations)
- Our business in power systems, telecommunications and industrial materials enables shared expertise benefiting the development of applicable products for the auto industry



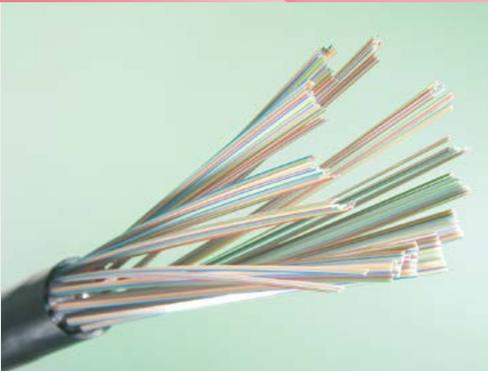
(Note) The net sales in each segment include internal sales between segments.

### 〈Growth Strategy〉

While the development of CASE-compliant products is accelerated, it is forecast that the global sales of automobiles continue to increase and the market for environment-friendly vehicles significantly grows with tightening regulations and other factors. Under such an environment, the Sumitomo Electric Group will introduce a wide range of new products based on our comprehensive and dominant market presence in the wiring harness business on a global scale that has been cultivated via the trinity system with Sumitomo Electric, Sumitomo Wiring Systems, Ltd. and AutoNetworks Technologies, Ltd. respectively in charge of marketing/planning, manufacturing and development, as well as the Group’s technologies related to power, communications and materials.

We will enhance our capabilities to make aggressive proposals to customers and also accelerate the development of new products by enhancing internal and external cooperation and making effective use of resources. We will expand our sales to global customers including those in China, Europe and the United States in addition to our conventional customers, and aim to become a mega-supplier of vibration control materials and other products centering on wiring harnesses.

# Infocommunications



Multicore optical fiber cables



Optical transceivers



Broadband network service products

## ◆ VISION 2022 Mid-term Management Plan: Segment Strategy

### Ideal Future State

Become a leading supplier in high-capacity network and interconnection markets centering on the technologies for high-end optical fibers, optical fiber connection, transmission devices, compound semiconductors and network access devices.

### Growth Strategy

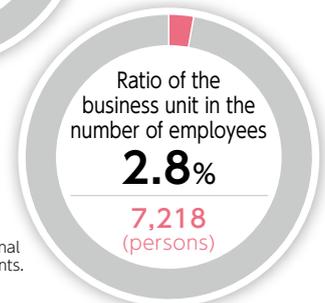
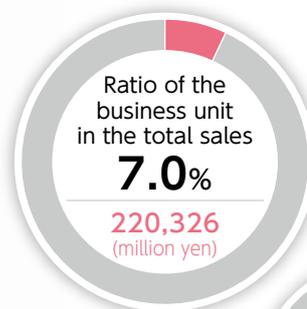
- Consolidate our core technology to support IoT-based societies.
- Pursue the development of innovative products and proposals that exceed customer expectations while increasing global market presence.
- Continuous enhancement of our business base: innovate IoT-related production technologies and facilitate expansion of our global business base.

### State of the Market

- Increase in the amount of data traffic due to development of high-capacity mobile networks (4G to 5G); spread of video streaming services; and transition to cloud services
- Further expansion of infocommunication network market
  - Growth in the capacity of submarine/onshore cables and cables for data centers and rising demand for optical fibers and their connection
  - Advances in the speed and capacity of optical/electronic devices
  - Expanded demand for data security
- Increasing demand for sensors to be used for facial recognition and autonomous driving

### Our Strengths

- Superior manufacturing technology for ultra-low loss optical fiber cable enabling high-speed, high-capacity telecommunication
- Established manufacturing technology for ultra-high-fiber-count optical fiber cables
- Leveraging optical precision-molding and mechatronics technologies
- Software development capability for visual- and optical-access devices
- Compound semiconductors for optical/wireless applications developed via collaborative vertical integration from raw materials to finished devices



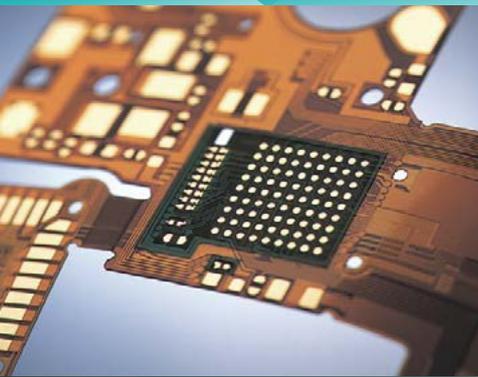
(Note) The net sales in each segment include internal sales between segments.

### <Growth Strategy>

Due to the rapid spread of IoT, the growth of video streaming services and cloud services and other factors, we expect to see a sharp increase in traffic data and investment in the expansion of data centers to respond to them. It is also anticipated in this field that technical innovation will be made at a furious pace to facilitate the development and commercialization of high-speed optical communications and 5G wireless communications.

Sumitomo Electric will develop and propose unique products based on capabilities to develop and manufacture special optical fibers and ultra-high-fiber-count optical cables enabling high-speed, high-capacity telecommunication, optical precision-molding and mechatronics technologies, capabilities of development via vertical integration from compound semiconductor materials to finished devices and capabilities to develop software related to network access devices. We also aim to expand our global market share and especially become a leading supplier in the high-capacity network and interconnection markets centering on the technologies for high-end optical fibers, optical fiber connection, transmission devices, compound semiconductors and network access devices.

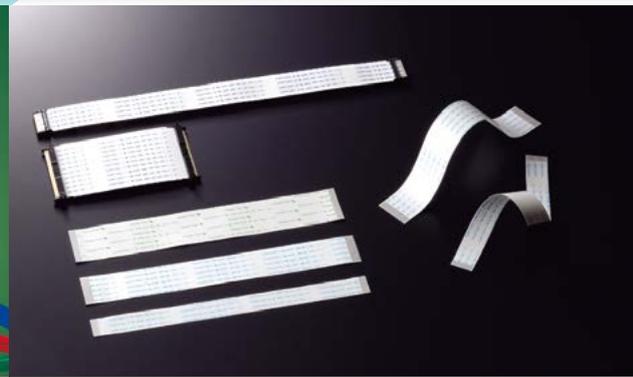
# Electronics



Flexible printed circuits (FPC)



SUMITUBE™



SUMI-CARD™

## ◆ VISION 2022 Mid-term Management Plan: Segment Strategy

### Ideal Future State

Become a top global supplier of unique high-performance cables, components and materials with a focus on mobile devices and mobile electronics.

### Growth Strategy

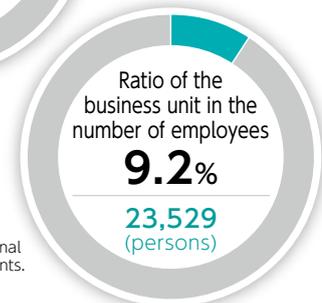
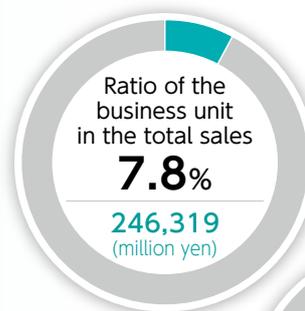
- Strengthen global sales and manufacturing assets primarily in North America, China and other Asian nations.
- Strengthen our development and proposition systems to meet market demands for new functions and more innovative, light, tough and precise products that facilitate high-speed data transmission.
- Strengthen manufacturing capabilities and business bases to become more agile and responsive to client demands within a shorter business cycle.

### State of the Market

- Continuous growth of the mobile device market and introduction of new functionalities and new standards in association with an exponential increase in data transmission volumes
- Shifting demand from traditional electronics sector to the auto industry as demand for greater sophistication in EVs and autonomous driving continues to rise
- Continuing demand for further computerization and weight reduction of aircraft and vehicles

### Our Strengths

- Solid partnerships with clients who lead growing markets
- Unique materials development, design and processing expertise including high-speed transmission, heat-resistant, high-precision, porous-membrane and electric-beam irradiation technologies
- Providing customers around the world with high-function wiring, protective-layer wiring and other high-functionality products via our global supply chain



(Note) The net sales in each segment include internal sales between segments.

### <Growth Strategy>

We anticipate that smartphone, tablet and other mobile device markets will continue to grow and that an increase in the transmission information volume will boost demand for new functions and new standards. We also expect a rising demand for our high-function wiring materials with the widespread use of EVs (electric vehicles) and growth of the aircraft industry.

Sumitomo Electric will accelerate the development of new products and ensure commercialization of them based on our unique core technologies for materials, processing and mounting that include high-speed data transmission, heat-resistant, high-precision and porous-membrane technologies. We also aim to become a top global supplier of unique high-performance cables, components and materials with a focus on mobile devices and mobile electronics.

# Environment & Energy



Copper wire rods



High-voltage optical fiber composite submarine cables



Magnet wires

## ◆ VISION 2022 Mid-term Management Plan: Segment Strategy

### Ideal Future State

**Become a global supplier that offers a whole range of environmental and energy products and systems.**

### Growth Strategy

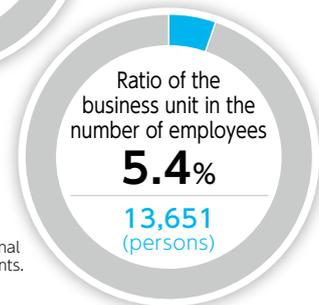
- Build a stronger global presence for the development and provision of electrical power infrastructure including long-distance submarine cables, etc.
- Provide products and systems that fit a rapidly changing energy market as evidenced by growing investment in renewable energy and growth in EVs.
- Meet demand for new products such as rectangular wire for drive motors supporting EV development and environmental issues.

### State of the Market

- Launching of major international grid-interconnection projects, primarily in Europe
- Growth in infrastructure demand in emerging nations
- Expansion of the energy-system market in response to upgraded electric power infrastructure and increasing use of renewable energy
- New business opportunities for eco-friendly vehicles and related infrastructure as market continues to embrace high-efficiency transport

### Our Strengths

- Among Japan's top-tier businesses with an impressive record of achievements
- Prominent technologies that enable creation of new high-value added products
- Diverse product family with associated services relating to infrastructure
- Extensive project-planning experience in the energy-system field
- Comprehensive strength as a corporate group with powerful affiliate companies in the heavy electrical machinery and engineering fields
- End-to-end development capabilities from raw material to finished product



(Note) The net sales in each segment include internal sales between segments.

## 〈Growth Strategy〉

We anticipate growth in major international grid-interconnection projects primarily in Europe and infrastructure demand in emerging countries, as well as increasing use of renewable energy and rising demand for the development of power feeding infrastructure in response to the widespread use of EVs. Sumitomo Electric will strive for the establishment of a global presence in the power infrastructure market, proposal of products and systems that fit a rapidly changing energy market and development and marketing of new products that support the use of EVs. Leveraging our business bases and technical capabilities as a comprehensive manufacturer of power cables with an integrated development system covering all stages from raw materials to finished products, we aim to become a global supplier that offers a whole range of environmental and energy products and systems.

# Industrial Materials



Cutting tools



Sintered parts



Prestressed steels

## ◆ VISION 2022 Mid-term Management Plan: Segment Strategy

### Ideal Future State

Become a leading global supplier of high-performance, high-functionality products by leveraging world-class materials and process technology.



### Growth Strategy

- **Innovation and Enhancement of Core Technologies**  
Deepen our advanced high-efficiency lines and develop new products in preparation for vehicle electrification.
- **Strengthening Proposal Capability for Customers**  
Pitch our products with a full understanding of customer needs to emphasize differentiation from our competitors.
- **Accelerating Overseas Businesses**  
Maintain consistency of quality regardless of region and provide services in a context that is sensitive to local issues.

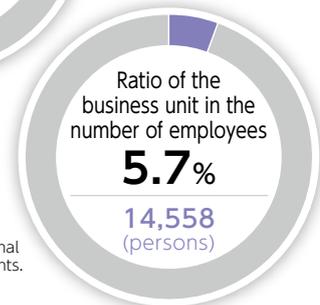
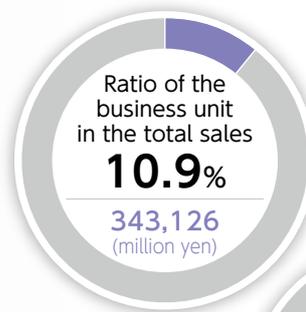


### State of the Market

- Increasing demand for lightweight materials for EV development
- Growth in the medical and aviation industries
- Further intensification of the global competition
- Intensified competition for cobalt procurement to meet increasing demand for battery applications

### Our Strengths

- **Excellent materials development capabilities**
  - Strong differentiation from competitors through the application of our unique materials and recycling technologies
- **Manufacturing capabilities**
  - Production and product-evaluation technologies for sophistication and efficiency improvement of the production lines of our customers
- **Global supply system**
  - Support for the globalization of our customers' business



(Note) The net sales in each segment include internal sales between segments.

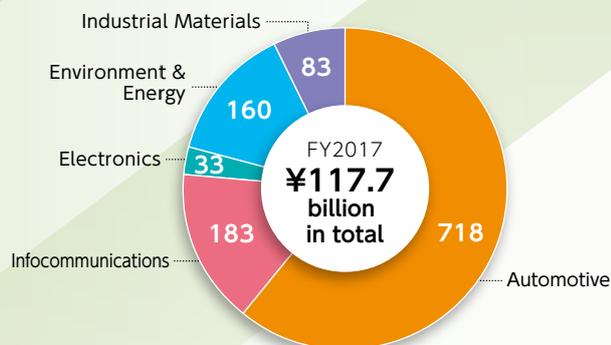
### 〈Growth Strategy〉

While it is expected that demand for lightweight materials will increase for EV development and that medical and aircraft markets will grow, we predict an intensification of competition for procurement of cobalt and other raw materials.

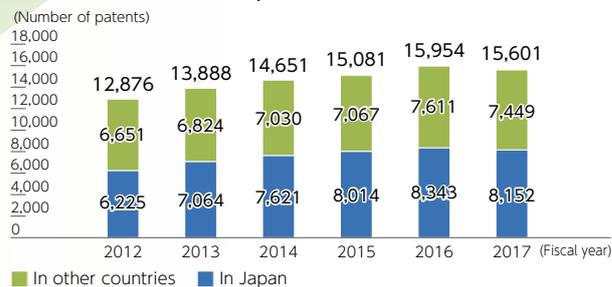
Sumitomo Electric will make use of the manufacturing capabilities that we have cultivated, including the material development, recycling, production and product-evaluation technologies, for sophistication and efficiency improvement of the production lines of our clients and will enhance its global business system with an aim to become a leading global supplier of high-performance, high-functionality products by leveraging world-class materials and process technology.

# R&D Group

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.

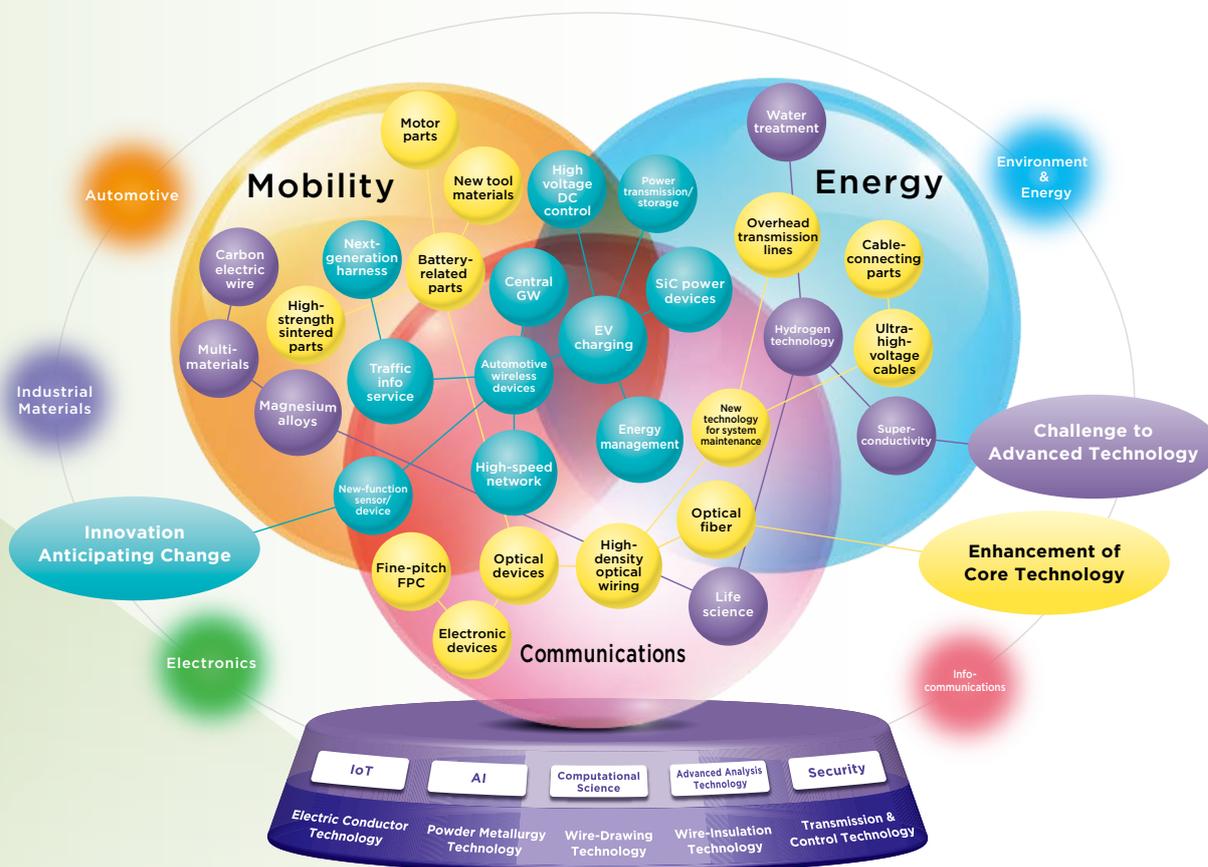
## VISION 2022 Mid-term Management Plan: Research and Development for the Next Generation

With a focus on Mobility, Energy and Communications fields, we will further enhance our wide-ranging core technologies by combining them with advanced analysis techniques, AI, IoT and computational science and work to strengthen the competitiveness in each business segment.

With recognition that drastic changes in the automobile society, such as increasing use of EVs, autonomous driving and car sharing, revolution in the energy field as a result of

widespread use of renewable energy and integration of them, provide new opportunities for growth, we will promote innovations based on a wide range of technologies owned by the Sumitomo Electric Group for timely commercialization.

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



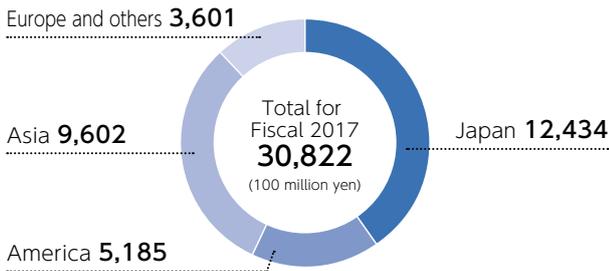
# Global Business Expansion

The Sumitomo Electric Group is developing business activities on a global scale, with 395 consolidated companies and over 250,000 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, 2018)
Head Office	4-5-33, Kitahama, Chuo-ku, Osaka, JAPAN

## Net Sales by Region (Consolidated)



## Number of consolidated companies by region

EUROPE		JAPAN		North/South America	
UK	7	Japan	109	USA	27
Italy	2			Argentina	1
Ukraine	1	Asia		Canada	2
Netherlands	3	India	7	Paraguay	1
Spain	1	Indonesia	12	Brazil	7
Slovakia	2	Cambodia	1	Mexico	10
Serbia	1	Singapore	4		
Czech Republic	1	Thailand	23	Oceania & Middle East & Africa	
Germany	12	Philippines	11	Egypt	2
Turkey	4	Vietnam	10	Australia	3
Hungary	3	Malaysia	5	Saudi Arabia	1
France	5	South Korea	7	Tunisia	3
Bulgaria	1	China	75	Morocco	4
Belgium	1	Hong Kong	5	South Africa	2
Poland	4	Taiwan	6		
Moldova	1				
Romania	3				
Russia	5				

## 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.

## 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 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.

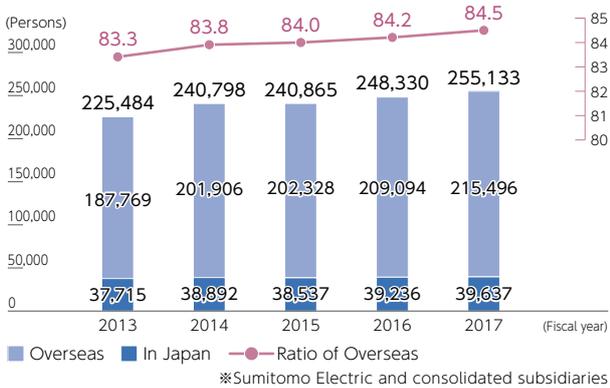


## Global development by business segment

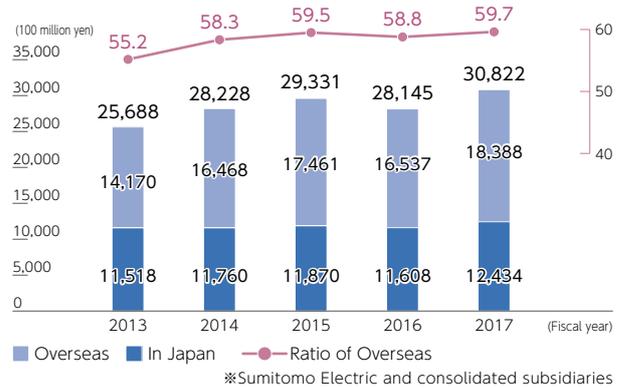
Beginning with the foundation of our first overseas manufacturing base in Thailand in 1969, we have promoted the establishment of overseas bases in consideration of market characteristics and needs for each business segment. In the parts of the world in which we have established our

bases, we are committed to job creation and human resource development while aiming to stabilize the local operation. We now have a total of 280 overseas affiliates with more than 200,000 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**

	2008	2009	2010	2011	2012	2013	2014	2015			2016			2017		
								Male	Female	Total	Male	Female	Total	Male	Female	Total
Americas	15,744	13,852	15,164	19,712	24,273	29,470	34,828	18,061	15,439	33,500	22,481	15,478	37,959	20,381	18,542	38,923
Europe/Africa	32,667	33,834	41,230	47,735	47,644	54,245	56,477	21,413	34,860	56,273	22,135	34,662	56,797	24,097	36,440	60,537
Southeast Asia	34,792	34,310	37,538	43,000	49,868	56,408	58,278	20,032	41,816	61,848	21,440	44,404	65,844	25,009	46,520	71,529
China	33,808	37,843	51,887	46,788	47,390	47,646	52,323	20,760	29,947	50,707	20,196	28,298	48,494	19,716	24,791	44,507
Japan	35,536	37,364	36,954	37,499	37,148	37,715	38,892	31,371	7,166	38,537	31,915	7,321	39,236	32,201	7,436	39,637
<b>Total</b>	<b>152,547</b>	<b>157,203</b>	<b>182,773</b>	<b>194,734</b>	<b>206,323</b>	<b>225,484</b>	<b>240,798</b>	<b>111,637</b>	<b>129,228</b>	<b>240,865</b>	<b>118,167</b>	<b>130,163</b>	<b>248,330</b>	<b>121,404</b>	<b>133,729</b>	<b>255,133</b>
Ratio of overseas employees	76.7%	76.2%	79.8%	80.7%	82.0%	83.3%	83.8%	84.0%			84.2%			84.5%		

※Sumitomo Electric and consolidated subsidiaries



# Highlights

## 2017

### April

- Celebrated our 120th anniversary
- Introduced new personnel systems including the system to take a leave to accompany his/her spouse who is assigned overseas and the expansion of the teleworking system

### June

- Started the sales of the walking monitoring system "Q'z TAG™ walk"

### July

- Launched "Kenkatsu!" activities, which encourage employees to maintain and improve their health
- Participated in the FY2017 Virtual Power Plant Project
- ENERGYMATE™-Factory\* incorporating Sumitomo Electric's sEMSA™ received the Minister of the Environment Award at the 56th Product Contest in JECA Fair 2017



\*ENERGYMATE™-Factory is a system that Nissin Electric Co., Ltd. has developed.

### August

- In collaboration with Nippon Telegraph and Telephone Corporation and others, demonstrated the world's largest transmission capacity of the standard-diameter optical fibers

### September

- Launched the mass production of high-quality SiC epitaxial substrate "EpiEra™"
- In collaboration with KDDI Research Inc. and others, succeeded in ultra-high-capacity optical fiber transmission experiment with a capacity of 10-petabits/second/fiber, which is substantially exceeding the previous world record



High-quality SiC epitaxial substrate "EpiEra™"

### October

- Increased the capacity to produce water treatment membrane modules to respond to the sharp rise in the demand in China and other countries
- Updated the web pages concerning the response to substances of concern under the upcoming RoHS 2 Directive in the electronic wire products



Water treatment membrane modules

November

- Tohoku Sumiden Precision Co., Ltd. went into full-scale operation



Tohoku Sumiden Precision Co., Ltd.

# 2018

January

- Launched the sales of string monitoring solution that can be retrofitted to existing utility-scale solar power plants

February

- Donated our spaced aerial cable for demonstration test with Mandalay Electricity Supply Corporation in Myanmar
- Won an Excellence Award in the Environmental Reporting Category of the 21st Environmental Communication Awards



March

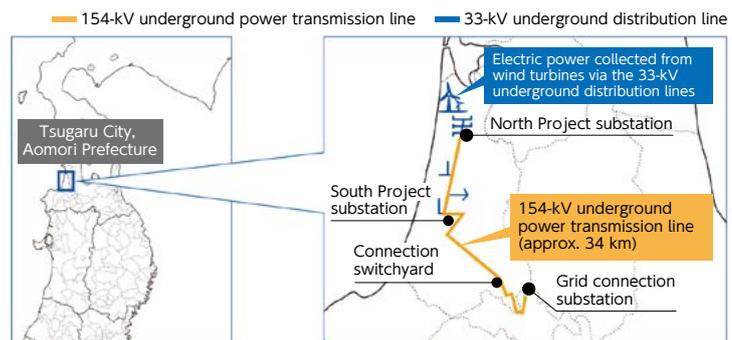
- Developed PLC string monitoring unit for 1,500 V DC solar power plants in Japan and abroad



PLC string monitoring unit for 1,500 V DC plants

May

- Received an order for power transmission and transformation equipment and its installation work for Wind Farm Tsugaru, Japan's largest wind farm



- Developed a simplified POREFLON™ membrane bio reactor (MBR) device that can be attached externally for livestock wastewater treatment, in collaboration with Institute of Livestock Industry's Environmental Technology



Simplified POREFLON™ MBR device that can be attached externally

## 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 corporate auditors and adopting a supervisory system under which independent outside corporate auditors and full-time corporate auditors 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 board of corporate auditors in consideration of the contribution of corporate auditors and the Board of Corporate Auditors to ensuring sound business management. The Board of Directors, the business execution system, corporate auditors and the Board of Corporate Auditors 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 corporate auditors

with various specialized knowledge and multifaceted views so that outside corporate auditors occupy the majority of the Board of Corporate Auditors, which aims to reinforce the monitoring system for the purpose of ensuring lawful and proper management.

## 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 a board of corporate auditors 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 corporate auditors 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 corporate auditors 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 13 Directors in the Company, who are comprised of 10 Executive Directors and three outside Directors not involved in business execution, and one of them is a female outside Director. For fiscal 2017, 13 Directors (excluding two outside Directors) received 917 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 2017, it conducted a questionnaire survey of all directors and corporate auditors including outside officers in March 2018 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

The findings showed that the operation has been improved through our past efforts including narrowing down of the matters to be discussed at the Board of Directors meetings by revising the criteria for selecting the important matters, improvement of the handouts for discussions and setting of the time for meetings in accordance with the content of the subjects to be discussed. In the future, we will continue to

improve the operation by preparing concise handouts for discussions in which the key points can be understood easily and enhancing the information to be provided in advance to outside officers.

### 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, 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. In the future, we will strive for the enhancement of risk analysis and monitoring on important matters, the expansion of opportunities for outside and internal directors to share information and other issues.

Thus, we have confirmed that the Board of Directors of Sumitomo Electric is effective in general at present. We will continue to strive for the improvement of the Board of Directors to further enhance its effectiveness.

### 《 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 corporate auditors and the Board of Corporate Auditors, as mentioned above, the majority of the corporate auditors are independent outside corporate auditors with various specialized knowledge and multifaceted views. These auditors, along with full-time corporate auditors and dedicated staff to corporate auditors, are in charge of monitoring in cooperation with the Internal Auditing Department and accounting auditors to ensure lawful and proper corporate management.

Five corporate auditors, consisting of two full-time auditors and three outside corporate auditors including a female one, constitute the auditing system to audit the business execution of directors. The Board of Corporate Auditors establishes audit plans and policies, in accordance with which each corporate auditor fulfills his role, as assigned by the Board of Corporate Auditors. Specifically, corporate auditors 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. Corporate auditors also receive reports from other auditors regarding their audit status, and exchange information with the accounting auditor when required.

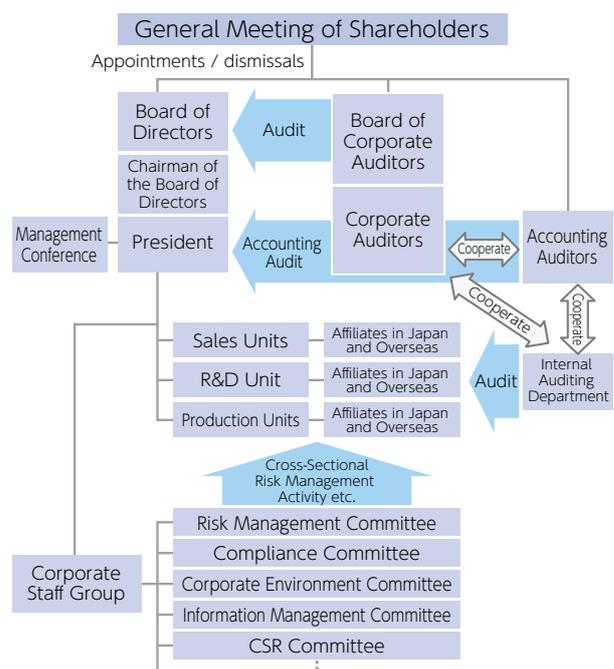
The section in charge of internal audits is the Internal Auditing Department, which surveys any problems and makes proposals on improvement to ensure proper and efficient business performance through audits, including on-site surveys, of our Group companies and other establishments. The department also collaborates with corporate auditors 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.

### Sumitomo Electric Group's corporate governance structure



## 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

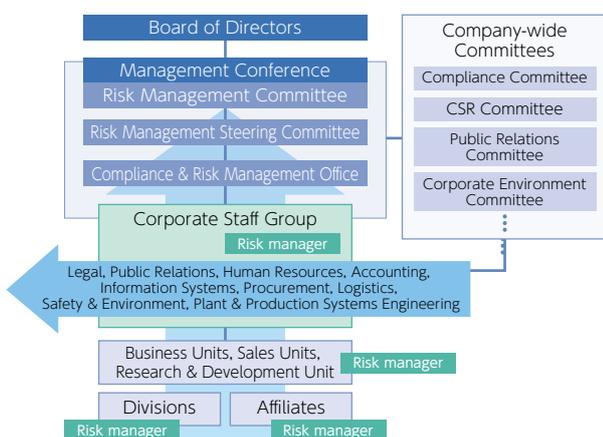
Risk management is performed based on the significance of the risks determined in consideration of the following issues:

- 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 unit and each affiliate. In the inventory, which is conducted annually, the significance of each of the risk items is determined by scoring its severity, probability 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 units 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

### 《 Promotion of Business Continuity Management (BCM) 》

Sumitomo Electric has developed Business Continuity Plans (BCPs) since fiscal 2007 to ensure that our important businesses can be continued even in the event of an emergency, such as an earthquake and pandemic of influenza, and that we can swiftly resume operations when our operations are interrupted. We also promoted business continuity management (BCM) for continuous improvement of the BCPs. In addition, we review the BCPs periodically, verify the effectiveness of the emergency response plan and take inventory of supply chain risks every fiscal year.

In line with the growing importance of overseas bases, we started to promote development of BCPs in each of the overseas subsidiaries as well in fiscal 2014.

Moreover, to further enhance the effectiveness of BCPs, we organize a table top exercise in which interested persons from relevant divisions gather to check the BCPs of specific units and affiliates. This exercise is conducted twice a year to 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, which include confirmation of the safety of employees, 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.

### 《 Cooperation with Local Communities 》

As a corporate citizen, we are committed to enhancing disaster preparedness abilities of the local communities, through the conclusion of disaster preparedness agreements with local governments and other means, in the areas where our bases are located.

## Protection of Personal Information, and Information Security

The Sumitomo Electric Group improves the information management system and revised rules and enhance the mechanism to prevent 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 》

In accordance with its Personal Information Protection Policy, Personal Information Protection Rules and other rules, Sumitomo Electric properly deals with the personal information of customers, business partners and employees handled in the course of its business while complying with laws, regulations and other standards relating to the protection and use of personal information. We also formulated the rules for handling specified personal information in November 2015 to ensure that such information is handled properly in accordance with laws and regulations and to prevent leakage and other problems. In addition, we revised the aforementioned policy and rules in May 2017 in response to the full implementation of the amended Act on the Protection of Personal Information. Also we have newly developed EU Residents Personal Data Protection Rules in response to the enforcement of the EU General Data Protection Regulation (GDPR) in May 2018 to properly protect the personal data of EU residents as specified by GDPR. Contract procedures to smoothly share personal data of EU residents in our Group have been also completed. Furthermore, we have put in place a system to promptly report any leak, loss, damage or other infringement of personal data of EU residents to the supervising agency in the EU.

### 《 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 has led to such results as the reduction of the risk of infection by computer viruses and the implementation of information security training.

We are taking measures to prevent the leakage of information on trade secrets and other important management assets on a global scale, including installation of antivirus software and intrusion prevention systems (IPS), data encryption in mobile computers and USB devices, automatic encryption of files attached to emails, training to respond to targeted attack emails and introduction of AI-based anti-malware software to enhance protection from unknown malware. In addition, we have set up a mechanism for the investigation of the traces of hacking in specific divisions as well as the investigation and detection of any illicit acts using log information of servers and network devices and implemented it on a trial basis.

With respect to the structure, the newly established SEI-CSIRT (Computer Security Incident Response Team) is now playing a central role in our efforts 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 FY 2017

Target of the training	No. of sessions	No. of participants	Main content
Staff in charge of classification	18	141	Tasks on how to classify goods and technologies
Export control sections	34	1,143	Export control practice
General employees (e-learning)	—	2,776	Outline of export control and internal rules
Domestic affiliates	2	84	Outline of export control
Overseas affiliates	6	272	Outline of export control and issues to be noted in foreign countries

## Intellectual Property Protection

Sumitomo Electric develops and manufactures various products based on its unique technologies. Proper protection and management of those products based on intellectual property rights (IPRs) is an important issue for our business management. Therefore, while promoting technical development, we are actively committed to the appropriate management of technical know-how and internal data as well as acquisition and use of IPRs such as patent rights and design rights. At the same time, we pay scrupulous attention and respect to the IPRs of other companies.

To this end, we have developed a rule on handling of trade secrets and intellectual property, and established an organization to provide business units and R&D units including those in our subsidiaries with 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, in the Intellectual Property Department. Actual intellectual property activities, including planning and implementation of them, verification of the progress and results and correction of any inappropriate points, are promoted through concerted efforts among respective divisions, R&D units and the Intellectual Property Department in the IP strategy meeting, which led by strategic IP committee members of the divisions and responsible persons in the Intellectual Property Department, based on the PDCA (plan-do-check-act) cycle.

To improve the IP activities of our Group as a whole, we continue to organize IP training sessions that match the experience and level of proficiency of each employee (10 courses in a year) and publish in-house newsletters such as "IP news" and "Standardization activity news." We also hold an Intellectual Property Right and Standardization Convention every year as a company-wide event to commend outstanding IP activities.

## 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



### 《 Compliance & Risk Management Office 》

Compliance & Risk Management Office is in charge of planning and coordination of overall compliance activities in the Sumitomo Electric Group and planning and implementation of activities to comply with competition laws and prevent bribery, and 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).

### 《 Sections in Charge of Compliance Items 》

The sections in charge of each of the compliance items in the Sumitomo Electric Group are listed below:

#### Sections in charge of compliance items

Compliance items	Sections in charge
The Sumitomo Spirit	Human Resources Development Department
Competition laws	Compliance & Risk Management Office, Legal Department
Prevention of bribery	
Security trade control	Security Trade Control Office
Prevention of insider trading	Finance Department
Political contributions and donations	Administration Division
Account settlement and tax affairs	Accounting Division
Prevention of conflicts of interest (competitive operation)	Compliance & Risk Management Office, Legal Department
Information management (confidential information, personal information)	
Prevention of unfair competition (illegal acquisition of confidential information)	
Intellectual property (service inventions, IP contracts, IP-related laws)	Intellectual Property Department
Proper use of information systems	Information Systems Division
Information security (cyber security)	SEI-CSIRT Office
Timely disclosure of company information	Public Relations Department
Respect for human rights, prohibition of discrimination	Human Resources Division
Prohibition of harassment	
Employment management (compliance with labor-related laws)	
Prohibition of any act that abuses opportunities given for business	
Health and safety	Safety & Environment Department
Environmental conservation	
Prevention of quality problems (defects in products, quality disguise, etc.)	Quality Management Division
Relevant laws, energy saving and safety assessment associated with capital investments	Plant & Production Systems Engineering Division
Customs	Procurement Division, Logistics Management Department
Subsidy	R&D Planning & Administration Division
Elimination of antisocial forces	Administration Division
Construction business and electric business	
Business decisions of directors, lawful operation of the Board of Directors meetings and general meetings of shareholders	
Subcontract Act*	Procurement Division
Prevention of improper trading (purchasing)	
Internal control	Internal Auditing Department
Indication of origin	Compliance & Risk Management Office, Legal Department

## Compliance Activities in Fiscal 2017

### 《 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. Versions in different languages (Japanese, English, Chinese, etc.) are posted on our website.



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 all officers and managers every year. New employees and newly promoted personnel are also provided with position-based training seminars. The regular training seminars for managers are held from April to July concerning such subjects as prevention of illicit acts, compliance with competition laws and prevention of bribery, and we also disseminate the Speak-Up System as mentioned below.



Compliance training

#### Targets of the Training and Number of Attendants (Period)

Target of the training	Number of attendants (period)
Officers (including executive officers)	40 (Dec. 2017)
Newly promoted personnel	approx. 640 (Feb. - Mar. 2018)
New employees of Sumitomo Electric	approx. 250 (Apr. 2017)
Managers of Sumitomo Electric and its subsidiaries in Japan	approx. 6,000 (Apr. - Jul. 2017)

### 《 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 reporting and consultation by employees, business partners and other parties not only in the Company but also outside it by appointing a law firm and a specialized call center firm, and the issues reported through this system are addressed with immediate investigation to take action to correct them and prevent recurrence where necessary. The contacts for consultation and reporting have been established to allow any employees of Group companies in Japan and overseas or other interested persons to access (overseas contacts were established in 2014). We present the outline of the system at the time of various internal training sessions and also work to disseminate it through monthly in-house magazines, Code of Conduct, our website, correspondences to business partners and other measures.

#### Number of Consultations at the Contacts of the Group-wide System

FY	In-house contacts	External contacts	Total
2015	6	45	51
2016	11	54	65
2017	24	50	74

※ 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 online training) organized for sales staff and other employees around the world.

#### Number of Employees Who Took Competition Law Compliance Training (Including Online Training)

FY	Number of attendants	Attendance rate
2014	approx. 4,400	99%
2015	approx. 4,700	95%
2016	approx. 5,000	91%

### 《 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 prohibition against bribery, prior approval and ex-post report on gifts, hospitality and donations, and requested each division 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 of Group companies, who are in charge of operation of the program, and provided them with detailed training. We will keep working to maintain and enhance the global bribery prevention system through continuous education, improvement of the program and its manual as well as collection and dissemination of relevant information.

### 《 Compliance on Quality 》

In response to recent scandals of data falsification and improper inspection, the Sumitomo Electric Group strives to enhance compliance on quality through initiatives including emergency survey of divisions of Sumitomo Electric and its Group companies on business rules and operation system for quality and inspection procedures, clarification of company-wide rules to prevent quality data falsification, improvement of relevant training and strengthening of the audits (see "Quality Compliance" in P43 for details).

## Basic Approach to Respect for Human Rights

In adherence with the Universal Declaration of Human Rights, which stipulates that "All human beings are born free and equal in dignity and rights," the Sumitomo Electric Group is committed to respecting and promoting human rights in all of the communities in which it operates.

More specifically, the Sumitomo Electric Group Charter of Corporate Behavior, which was instituted based on the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles in September 2005, specifies respect for human rights, professional development and establishment of safe and sound workplaces.

While constantly responding to increasing social demand as to human rights and other changes in the environment, the Sumitomo Electric Group takes a wide range of measures as a corporation to solve various human right issues, and strives to create lively workplaces where each employee can work with enthusiasm.

### Sumitomo Electric Group Code of Conduct (established in April 2018)

Sumitomo Electric Group Code of Conduct, which clarifies the acts to be conducted by all officers and employees in all Group companies, clearly states the following rules on human rights along with specific examples:

- Commitment to respect for human rights, opposition to child and slave labor
- Prohibition of discrimination and harassment
- Encouragement of contractors and suppliers to respect human rights

## Commitment to Respect for Human Rights among Employees

We set respect for human rights as a basic value standard and work to disseminate it in workplaces through continuous enlightenment activities and other initiatives.

### 《Sumitomo Electric Group Global Human Resource Management (HRM) Policy》

(established in September 2011 and revised in January 2017)

While the Sumitomo Electric Group has traditionally conducted its business with a focus on human resources in accordance with the Sumitomo Spirit, we established Sumitomo Electric Group Global Human Resource Management Policy (Global HRM Policy) to clarify our basic policy on human resources. This policy specifies the Group's commitment to the provision of various career opportunities regardless of race, ethnicity, national origin, religion, age, gender, gender identity, sexual orientation or disability, promotion of diversity and other related initiatives. We have declared the policy to inform people in and outside of the Group about it.

※See P49 for the text of the Global HRM Policy.

### 《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 2017, a total of 13,539 persons participated in the human rights-related seminars, including the education provided mainly by Human Rights Task Committee members at their worksites.

### Examples of human rights training and enlightenment programs in 2017

- Harassment prevention training for all employees
- Human rights training for officers, new employees and newly promoted employees in each position
- Section-based human rights training at worksites in each base
- Development of human rights training promotion leaders (The HR Division and managers/supervisors at worksites attended the Buraku Liberation and Human Rights Leadership Course.)
- Organization of an in-house contest for human rights slogans (received 4,242 slogans in 2017)



Human rights leader development course  
(Itami Works)



Lecture meeting on human rights  
(Itami Works)

### 《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.

## Commitment to Respect for Human Rights in the Supply Chain

We also pay attention to human rights widely in the supply chain in addition to the working environment for employees.

### 《Sumitomo Electric Group CSR Procurement Guidelines》

(established in August 2010, revised in April 2014)

For the supply chain of our Group, we have specified rules on "Respect to Human Rights and Considerations of Occupational Health and Safety" in the Sumitomo Electric Group CSR Procurement Guidelines. Suppliers of our Group are asked to follow them at the time of procurement.

### Excerpt from CSR Procurement Guidelines

#### 7. Respect to Human Rights and Considerations of Occupational Health and Safety

Suppliers are requested to respect fundamental human rights of all individuals and endeavor to make their workplace safe, sound and energetic.

The use of forced labor or child labor, inhumane treatment or discrimination of workers or illegal employment of foreign workers is not allowed. The employment conditions including wage and work environment as well as occupational health and safety standard must be compliant with laws and regulations in the countries and regions where suppliers are doing business.

### 《Cooperation with Human Rights Organizations and Governments》

Sumitomo Electric participates in human rights organizations including the Corporate Federation for Dowa and Human Rights Issue, Osaka. In cooperation with relevant governmental agencies and other organizations, we work toward the realization of a society in which human rights are guaranteed for all.

# 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"> <li>• Compliance with laws, regulations, administrative guidance, etc.</li> <li>• Tax payments</li> <li>• Cooperation for government policies to solve public problems</li> </ul>	<ul style="list-style-type: none"> <li>• Communications through economic organizations and trade associations</li> <li>• Notifications, response to surveys and questionnaires</li> <li>• Consultation with competent authorities, public comments</li> </ul>
	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"> <li>• Reduction of greenhouse gas emissions</li> <li>• Promotion of energy saving and recycling</li> <li>• Reduction of the amount of waste, reduction of the release of harmful chemical substances</li> </ul>	<ul style="list-style-type: none"> <li>• Comply with the relevant laws and regulations</li> <li>• Environmental conservation activities in accordance with the PDCA cycle</li> <li>• Stakeholder dialogue</li> </ul>
	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"> <li>• Supply of socially useful and safe products and services</li> <li>• Improvement of customer satisfaction on all aspects including delivery time, etc.</li> <li>• Provision of accurate and appropriate information on products</li> </ul>	<ul style="list-style-type: none"> <li>• Communication through daily operations</li> <li>• Newsletters, e-mail delivery, websites</li> <li>• Information exchange at exhibitions etc.</li> </ul>
	Local Communities and NPOs/NGOs	The Sumitomo Electric Group conducts business activities through 395 companies located in approx. 40 countries all over the world (as of March 31, 2018).	<ul style="list-style-type: none"> <li>• Respect for culture and custom, contribution to development</li> <li>• Prevention of accidents and disasters, environmental conservation</li> <li>• Cooperation and coordination for the solution of environmental and other problems</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in events, support of traditional performing arts</li> <li>• Factory tours, opening of facilities, joint hosting of festivals</li> <li>• Employees' contribution to local communities</li> <li>• Communication through cooperation and support</li> <li>• Stakeholder dialogue</li> </ul>
	Employees	The Sumitomo Electric Group has approx. 255,000 employees consisting of approx. 40,000 employees in Japan and approx. 215,000 employees in other countries. More than 80% of the Group employees thus work outside Japan (as of March 31, 2018).	<ul style="list-style-type: none"> <li>• Respect for human rights, personality and individuality</li> <li>• Development, use and evaluation of human resources</li> <li>• Creation of a work environment where all employees can demonstrate their capabilities</li> <li>• Contribution to occupational safety and health</li> </ul>	<ul style="list-style-type: none"> <li>• Surveys to create a lively work environment</li> <li>• In-house magazines, Global Magazines</li> <li>• Intranet, President's blog</li> <li>• Management council meetings for discussion between labor and management</li> <li>• Informal meetings between executives and employees</li> </ul>
	Shareholders and Investors	The total number of our shareholders is approx. 57,000, and the number of shares issued and outstanding is about 800 million. By type of shareholders, financial institutions and foreign holders own 40.0% and 39.8% of the shares respectively, followed by Japanese individuals and others (12.9%) (as of March 31, 2018).	<ul style="list-style-type: none"> <li>• Maintenance and improvement of the corporate value</li> <li>• Proper return of the profits (as dividends)</li> <li>• Timely and proper disclosure of corporate information</li> </ul>	<ul style="list-style-type: none"> <li>• General meetings of shareholders</li> <li>• Financial result briefings</li> <li>• Reception of investors and interviewers</li> <li>• Annual reports</li> <li>• Investor relations website</li> </ul>
	Suppliers	The Partners' Meeting held in fiscal 2017 gathered approx. 96 of our main suppliers. (FY2017)	<ul style="list-style-type: none"> <li>• Fair trade</li> <li>• Support and cooperation for the achievement of CSR procurement</li> </ul>	<ul style="list-style-type: none"> <li>• Communication through daily procurement activities</li> <li>• Partners' meetings</li> <li>• Communication through the supplier survey sheet and other channels</li> </ul>

## 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.

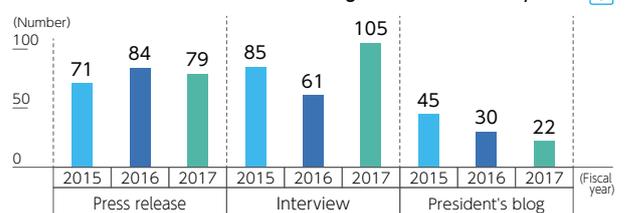
## Efforts to Disseminate Information

Sumitomo Electric has 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 improve understanding of the Group. Meanwhile, we totally renewed the conventional newsletter "SEI WORLD" and started to publish "id" in July 2017. This new newsletter introduces the efforts of our Group to tackle social issues from various angles.

In our activities to send information via our websites, we kept them updated by adding new information and enhancing their content. For example, we produced and posted a video on our history to celebrate our 120th anniversary. In December 2017, we also set up a website to support the Lake Biwa Mainichi Marathon, for which Sumitomo Electric has been a special sponsor since 2013.

In January 2015, in an effort to enhance awareness of our brand, we launched a visual identity (VI) project, which aims to give consistency to designs, logos, colors and fonts used for company communications throughout the Sumitomo Electric Group and establish a common impression and worldview. Since the launch, we have made continuous efforts to disseminate the VI concept by applying it to various publications and promotional materials.

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





## We will sincerely respond to the continuously changing social demand based on the unshakable Sumitomo Spirit

**Yoshitomo Kasui** Senior Managing Director and Chairperson of the CSR Committee

Demand from society to companies changes over time. Companies would not be able to survive if they fail to respond to such changes in social needs.

We at the Sumitomo Electric Group have responded to such needs of times based on the Sumitomo Spirit, which is our basic philosophy we have inherited since our foundation. "Mutual Prosperity, Respect for the Public Good" -- this unchanging basic philosophy is also consistent with Glorious Excellent Company, which is our ideal state in the future. The word "Excellent" symbolizes the quantitative aspect while

"Glorious" represents the far-reaching qualitative goal. This phrase indicates that we become a company that does not only achieve numerical targets for sales and profits but also constantly meets social demand and continues to exist.

This spirit is clearly reflected in the CSR activities of the Sumitomo Electric Group. We promote the activities in the five CSR priority themes of quality, supply chain, human resources, environmental preservation and social contribution, which are comprehensively covered in our efforts to seek "SEQCDD" according to the priority order.

The first priority is safety, followed by the environment and then quality. Those factors are also expected to be applied to the supply chain in addition to our company and we will endeavor to enhance CSR procurement in the future.

As a theme in the category of human resources, it is necessary to promote diversity in consideration of local features and wide-ranging characteristics of employees in response to the globalization of our business. When we make a social contribution through business, we will handle it in consideration of the time and space axes without doing something extraordinary. As to the issues not directly related to our business, we will continue to make social contributions through the CSR Foundation.

Although it is a difficult challenge to establish CSR management covering the entire group including listed subsidiaries as well as overseas subsidiaries and sub-subsidiaries, we will continue to sincerely deal with it and make steady efforts by trying what we can do first. Also for the SDGs, which have been recently adopted by more companies, we will seek reliable solutions through the process to achieve SEQCDD.

## 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 response to the formulation of our new mid-term management plan "VISION 2022" in fiscal 2018, we revised some of the CSR core categories. With "quality," "supply chain," "human resources," "environmental preservation" and "social contribution" as the new 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.



# New CSR Core Categories, New Priority Themes and Main Targets

In line with the announcement of our new mid-term management plan "VISION 2022," we revised the CSR core categories and priority themes as presented below and also set new main targets including new key performance indicators (KPIs) for fiscal 2022.

While we set a target of reducing global greenhouse gas emissions by 5% from the fiscal 2012 level as a KPI for VISION 2017, we failed to meet the target with a reduction of 2.3% due to the situation where our sales grew by approximately 20% over the past five years.

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 underlie our efforts to meet the targets for VISION 2022 and are essential to become a Glorious Excellent Company, the ideal state of our Group, we will enhance our efforts to meet the targets.

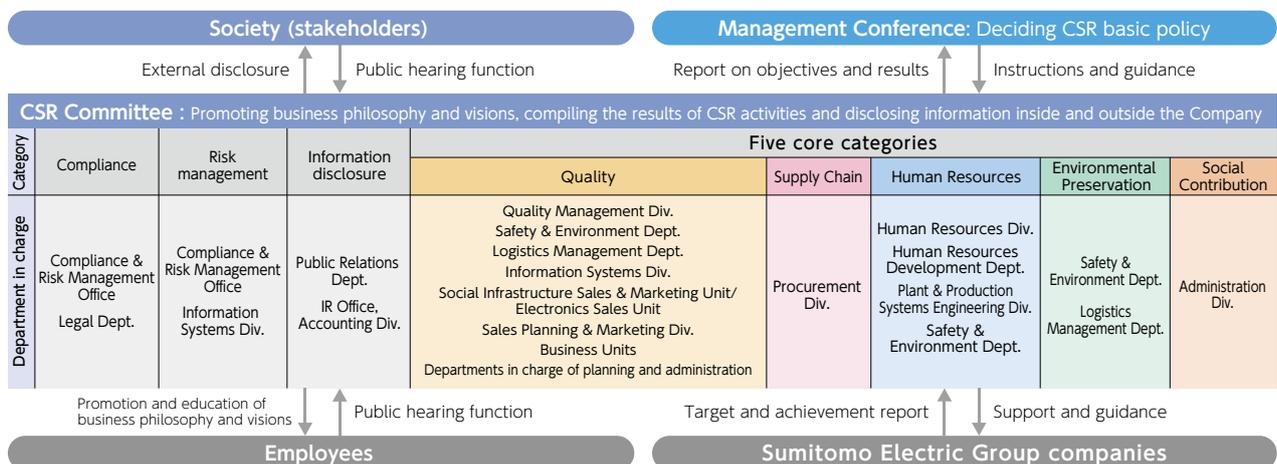
Core categories	Priority themes	Main targets (including KPIs for fiscal 2022)	Main related SDGs*
Quality	Product quality & product safety	Reduce the index for the number of complaints* by 30% from the FY2017 level	
Supply chain	Promotion of CSR procurement	Promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement	
Human resources	Promotion of diversity and occupational safety	Promotion of measures to appoint and develop Group Global Executives	
		Achieve zero serious accidents and reduce the number of accidents by half from the FY2017 level	
Environmental preservation	Prevention of global warming	Achieve no increase in CO2 emissions 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	

\*Improvement rate in the number of complaints from fiscal 2017 (results in FY2017 = 100)

## 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. Under the system shown in the figure below, the Committee conducts its activities as a cross-sectional organization to promote CSR initiatives in the Sumitomo Electric Group. 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**

\* 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.

\* SDGs: Sustainable Development Goals

See P35 for details.

# Targets and Actual Results in Fiscal 2017 / Targets for Fiscal 2018

In the Sumitomo Electric Group, the departments in charge of the CSR core categories respectively set various annual targets in addition to the main targets mentioned in P32, 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 2017 and targets for fiscal 2018 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	Targets for FY 2017	Results in FY 2017	Evaluation	Page	Targets for FY 2018	Related SDGs
Quality	Reduce complaints by 9% from the previous fiscal year	Decreased by 6.1% from the previous fiscal year	△	43	Reduce the index for the number of complaints by 21% from the previous fiscal year	
	Continue to promote Own Process Quality Assurance Activities (eighth year) <ul style="list-style-type: none"> <li>① Strengthening of quality initiatives in the design process</li> <li>② Company-wide development of the "3 points control of quality" (improvement of the activities)</li> <li>③ Expansion of activities performed on practical themes</li> <li>④ Continuance of activities for company-wide dissemination (through the issuance of booklets and holding of exchange meetings about Own Process Quality Assurance Activities)</li> </ul>	<ul style="list-style-type: none"> <li>① Disseminated the cause investigation results of design-related complaints and checked for similar risks</li> <li>② Started model activities aimed at quantitative improvement</li> <li>③ Conducted a total of 276 activities on practical themes in a year</li> <li>④ Held 2 exchange meetings and added 9 examples to the booklets to introduce good practices</li> </ul>	○	42 43	Continue to promote Own Process Quality Assurance Activities (ninth year) <ul style="list-style-type: none"> <li>① Company-wide development of important measures to prevent complaints</li> <li>② Company-wide development of the "3 points control of quality" (development of procedures to promote quantitative improvement)</li> <li>③ Expansion of the results of the activities on practical themes</li> <li>④ Continuance of activities for company-wide dissemination (through the issuance of booklets, holding of exchange meetings and other initiatives)</li> </ul>	
Supply chain	Request suppliers in Japan and overseas to take actions based on the CSR Procurement Guidelines, and promote the implementation of the CSR procurement questionnaire survey	<ul style="list-style-type: none"> <li>• Conducted a CSR procurement self-evaluation questionnaire survey targeting about 850 suppliers in Japan and overseas</li> <li>• Interviewed 86 suppliers in Japan and asked them to make improvement</li> </ul>	○	46	<ul style="list-style-type: none"> <li>• Request suppliers in Japan and overseas to take actions based on the CSR Procurement Guidelines, and promote the implementation of the CSR procurement questionnaire survey</li> <li>• Continue to implement the training program that supports compliance</li> <li>• Extend the application of common basic rules on procurement to overseas affiliates</li> </ul>	  
	<ul style="list-style-type: none"> <li>• Continue to implement the training program that supports compliance</li> <li>• Extend the application of common basic rules on procurement to overseas affiliates</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance training: Provided to 1,786 persons in Production Group and Corporate Staff Group. Provided new training that simulates the process to advance to commercialization for 33 persons in R&amp;D Group</li> <li>• Basic rules (procurement guidelines): Inspected 17 overseas affiliates and gave instructions</li> </ul>	○	47 48		
Human resources	<ul style="list-style-type: none"> <li>• Realization of the Global HRM Policy               <ul style="list-style-type: none"> <li>① Continuance of promotion of the talent management cycle</li> <li>② Continuance of efforts to clearly define the HR rules to be commonly applied on a global scale in writing</li> </ul> </li> <li>• Develop global activities of the HR Division               <ul style="list-style-type: none"> <li>① Dispatch of trainees from the HR Division</li> <li>② Continuance of HR manager meetings of overseas Group companies</li> <li>③ Use of English as the language at the monthly HR Centers Meetings</li> </ul> </li> </ul>	《Realization of the Global HRM Policy》 <ul style="list-style-type: none"> <li>① Conducted Business Unit (B.U.) HR Meetings. Drafted a global standard for the workflow of "position management and human resource management" to implement a global HR database</li> <li>② Documented and issued the common Global HR standards and guidelines on 8 topics (as planned)</li> </ul> 《Develop global activities of the HR Division》 <ul style="list-style-type: none"> <li>① Dispatched an HR staff member from Headquarters (HQ) as an overseas trainee as we did last year</li> <li>② Held a Global HR Conference that HR managers of overseas group companies attended from October 23 to 25 as planned</li> <li>③ Conducted an HR Center Conference in Japan and a monthly HR Center conference call using English language</li> </ul>	○	49 50	<ul style="list-style-type: none"> <li>• Realization of the Global HRM Policy               <ul style="list-style-type: none"> <li>① Continuance of promotion of the talent management cycle                   <ul style="list-style-type: none"> <li>Continue conducting B.U. HR Meetings and start using the Global HR Database (SuccessFactors) to further improve the talent management cycle to identify and develop the next generation of Sumitomo Electric Group (SEG) Global Executives</li> </ul> </li> <li>② Continuance of efforts to clearly define the HR rules to be commonly applied on a global scale in writing                   <ul style="list-style-type: none"> <li>Prepare for the implementation of the HR rules to be commonly applied on a global scale in writing. Consider adding new standards to the issued documents and releasing new documents</li> </ul> </li> <li>③ Further activation of Regional Executive Conferences and Area Committee activities                   <ul style="list-style-type: none"> <li>Based on the operation policy, allocate budget for these activities and provide support from the related divisions and departments in Sumitomo Electric. Work to develop the next generation of SEG Global Executives through the relevant activities</li> </ul> </li> </ul> </li> <li>• Develop global activities of the HR Division               <ul style="list-style-type: none"> <li>① Dispatch of trainees from the HR Division                   <ul style="list-style-type: none"> <li>Dispatch HR staff member from HQ as we did last year</li> </ul> </li> <li>② Compliance with the standards in the global HR document "SEG Common Languages"                   <ul style="list-style-type: none"> <li>Observation of the rules that require preparation of important documents published by the HR Division in multiple languages and use of interpreters in HR-related meetings (when the attendees cannot communicate in a common language.)</li> </ul> </li> <li>③ Continuance of Global HR Conferences in Japan                   <ul style="list-style-type: none"> <li>To be held on October 22 and 23 at the Osaka HQ</li> </ul> </li> </ul> </li> </ul>	   
	Develop the SWITCH 17 Campaign (final year) <ul style="list-style-type: none"> <li>• Strengthening of initiatives with focus on the review of working styles. Aim to reduce total working hours to 1,900 to 2,000 hours in a year and encourage each employee to take 15 paid holidays on average in a year</li> <li>• Continuous implementation of communication measures in each establishment and examination of company-wide measures</li> <li>• Launch of "Kenkatsu!" activities to assist employees in maintaining and improving their health ("Kenkatsu!" is a coined term meaning activities seeking health)</li> <li>• Discussion of action guidelines for fiscal 2018 and thereafter</li> </ul>	<ul style="list-style-type: none"> <li>• Set targets on work style reforms for each division and conducted initiatives. Achieved the targets on total working hours and paid holidays mentioned on the left</li> <li>• Introduced a system of paid holidays that can be taken by the hour</li> <li>• Used the results of the Survey to Create a Lively Working Environment, as well as comments from town meetings, for the examination of HR measures</li> <li>• Conducted stress check and follow-up activities including training and interviews based on the results</li> <li>• Subsidized health promotion activities (cafeteria points for the cost of a sports gym and fee for participation in a sports convention)</li> <li>• Examined a roadmap for work style reforms toward VISION 2022</li> </ul>	○	53 54 55		

Core Category	Targets for FY 2017	Results in FY 2017	Evaluation	Page	Targets for FY 2018	Related SDGs
Human resources	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 24 or less	<ul style="list-style-type: none"> <li>• Serious accidents: 0</li> <li>• Accidents resulting in remaining disabilities: 1</li> <li>• Accidents resulting in lost work time, no lost work time accidents and accidents causing minor injury: 42 (including accidents resulting in remaining disabilities)</li> </ul>	▼	60	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 38 or less Accident score: 216 or less	
	Implement priority items for fiscal 2017 (measures to be taken continuously) <ul style="list-style-type: none"> <li>• Promote the establishment of the following priority safety activities               <ol style="list-style-type: none"> <li>① Activities to prevent serious accidents</li> <li>② "Safety! Power OFF Activity"</li> <li>③ Activities for ensuring safety in multi-worker operations</li> <li>④ Prevention of recurrence of similar accidents involving injury</li> </ol> </li> <li>• Re-establish safety culture               <ol style="list-style-type: none"> <li>① Promotion of S-T-O-P Accident Campaign* and elimination of unsafe actions</li> <li>② Identification of weaknesses to share them on a company-wide scale and setting of the "state that the company aims to be"</li> </ol> </li> </ul>	《Promotion of the establishment of the priority safety activities》 <ul style="list-style-type: none"> <li>• In fiscal 2017, developed activities on the items ① to ③ mainly through self inspection in each division or base with "viewpoint of workers" and "standardization + education work" as the key points (activities on ④ were performed by each division)</li> <li>• The number of each of the target tasks was determined as follows and the countermeasures are currently in progress:               <ol style="list-style-type: none"> <li>① Serious Accident Prevention: 5,666</li> <li>② Power OFF: 3,045</li> <li>③ Safety for multi-worker operation: 1,641</li> </ol> </li> </ul> 《Re-establish safety culture》 <ol style="list-style-type: none"> <li>① Promoted S-T-O-P Accident Campaign through enlightenment with posters and other tools</li> <li>②-1. Identified weakness of the Sumitomo Electric Group with a safety awareness survey</li> <li>-2. Designed a draft improvement plan (the state that the company should aim to be) at an improvement review meeting</li> </ol>	○	59	Implement priority items for fiscal 2018 <ul style="list-style-type: none"> <li>• Safety VISION 2022               <ul style="list-style-type: none"> <li>• Safety measures in facilities</li> <li>• Development of human resources with high safety awareness</li> <li>• Fostering safety culture</li> </ul> </li> <li>• Activities in each site               <ul style="list-style-type: none"> <li>• Priority safety activities                   <ol style="list-style-type: none"> <li>① Activities to prevent serious accidents</li> <li>② Safety! Power OFF activity</li> <li>③ Hearing of problems by top management</li> </ol> </li> </ul> </li> <li>• Activities to be conducted continuously               <ol style="list-style-type: none"> <li>① 1-2-3 activities</li> <li>② S-T-O-P accident campaign</li> <li>③ 3-pillar safety management</li> <li>④ Thorough training for unskilled workers</li> </ol> </li> <li>• Group-wide structural reinforcement activities</li> <li>• Emergency / priority safety management activities</li> <li>• Safety education</li> <li>• Plant disaster prevention</li> <li>• Global safety diagnosis</li> <li>• Group-wide sharing of best practices</li> </ul>	
Environmental preservation	Achieve the targets in all items in the Action ECO-21 (Phase VI) campaign	Out of the 14 items, Performance achieved the targets: 11 items, Performance failed to achieve the targets: 3 items	▼	62	<ul style="list-style-type: none"> <li>• Achievement of the targets in all items of the Action ECO-22V campaign</li> <li>• Implementation of environmental audits               <ul style="list-style-type: none"> <li>In Japan: Legal compliance audits</li> <li>Overseas: Legal compliance audits (China, ASEAN, the US)</li> </ul> </li> <li>• Continue the practical training, in which simulated diagnosis is conducted using the actual products based on "hiyari" or near-miss reports and past audits</li> </ul>	 
	Conduct environmental audits In Japan: Continue legal compliance audits Overseas: Conduct legal compliance audits (China, ASEAN and the US)	In Japan: Conducted at 9 sites Overseas: Conducted at 3 sites (China, Vietnam and the US)	○	63 64		 
	Continue the practical training, in which simulated diagnosis is conducted using the actual products based on "hiyari" or near-miss reports and past audits	650 persons participated in managerial post-based training	○	63		 
Social contribution	Implement the following fund projects <ol style="list-style-type: none"> <li>① Monetary contributions to university courses: 93 million yen</li> <li>② Subsidies for academic and research programs: 30 million yen</li> <li>③ Supply of scholarships: 42.1 million yen</li> </ol>	Implement the following fund projects <ol style="list-style-type: none"> <li>① Monetary contributions to university courses: 93 million yen</li> <li>② Subsidies for academic and research programs: 30.6 million yen</li> <li>③ Supply of scholarships: 40.5 million yen</li> </ol>	○	39	<ul style="list-style-type: none"> <li>• Implement the following fund projects               <ol style="list-style-type: none"> <li>① Monetary contributions to university courses: 113 million yen</li> <li>② Subsidies for academic and research programs: 30 million yen</li> <li>③ Supply of scholarships: 43.7 million yen</li> </ol> </li> <li>• Promote partnership and cooperation with nonprofit organizations (NPOs) for the support the reconstruction of the Tohoku Region and other initiatives</li> </ul>	 
	Promote partnership and cooperation with nonprofit organizations (NPOs) for the support the reconstruction of the Tohoku Region and other initiatives	<ul style="list-style-type: none"> <li>• Held a market of specialties from the Tohoku region at the Tokyo Head Office to support its reconstruction from the Great East Japan Earthquake</li> <li>• Participated in the TABLE FOR TWO program and donated 20 yen from the sale of each low-calorie meal</li> </ul>	▽	39		

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

### CSV Activities

#### Basic Approach

**We will be committed to the creation of shared value (CSV) and activities that support the growth of local communities 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. We recognize that social contribution of our Group is not limited to donations and philanthropy but also includes the supply of useful products, technologies and services to society through business activities to create shared value based on our CSR basic policy. At the same time, We are determined to contribute to a "better society and environment" through proactive and aggressive commitment to solving social challenges while always being conscious of our role as a member of society.

#### Re-definition of Priority Themes

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 on the right page illustrates the values offered by the Sumitomo Electric Group for the development of a society that is projected around the year 2030 in our mid-term management plan 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.

#### What are the SDGs?

The Sustainable Development Goals (SDGs) are 17 goals and 169 targets presented by the UN along with long-term development guidelines for the period from 2015 to 2030. They include specific initiatives to solve all types of social challenges, including those in developing countries such as poverty and health and hygiene, as well as global warming and other environmental problems, improvement of working conditions and consideration of diversity.



### 3 Forms of the Ideal Society We Seek and 9 Fields for Our Initiatives

Forms of the ideal society we seek		9 Fields for our initiatives		
<b>A Green Society</b>	More environment-friendly society realized with products and services that facilitate the reduction of CO <sub>2</sub> emissions, widespread use of renewable energy and replacement and recycling of rare resources	Development of eco-friendly products that limit CO <sub>2</sub> emissions	Encouraging use of renewable energy with smart energy systems	Promoting recycling technologies and pursuing materials development less dependent on scarce resources, driving resource-friendly practices
<b>A Safe and Secure Society</b>	Safer and more secure society realized through the development of communication systems that support automatic driving, improvement of infrastructure durability and practical use of sophisticated security technology	Car-to-car and car-to-road connectivity for a safer driverless society	Creating a secure urban environment with enhanced infrastructure durability	Increasing telecommunications security for safety and privacy
<b>A Comfortable and Viable Society</b>	More comfortable society with higher potential for growth realized through the development of new technologies to transmit large volumes of information at higher speeds and the establishment of new systems that connect cars with society, people and cities	Achieving faster data transmission through advanced infocommunication technologies underpinning an IoT-based society	Providing technology that connects automobiles to society, liberating transportation and increasing comfort	Developing solutions that connect cars, houses, people, and communities, enabling effective energy-sharing

### 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™)

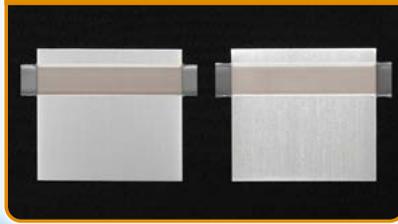


## Automotive/Transportation

High-strength aluminum wiring harness



Tab-Lead for on-vehicle batteries



High durability prestressing strands



CELMET®(porous metal)



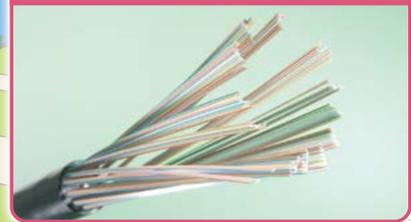
Sintered parts



GaN transistors for cellular phone base stations



Multicore optical fiber cables



Traffic control systems



# Social Contribution Activities

## 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.

## 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 2017, the SEI Group CSR Foundation received contributions of a little over 156,590 thousand yen in total from Sumitomo Electric (with the whole amount, including a little over 590 thousand yen donated through the cafeteria plan, appropriated for operation) and (1) donated 93 million yen in total to university courses, (2) supplied subsidies of 40.5 million yen in total to academic and research activities, and (3) provided scholarships of approximately 30.6 million yen in total for 35 Japanese students and 18 foreign students learning in Japan and 110 local students studying at overseas universities. In the program to make donations to university courses, we provided monetary support for two new courses along with the six courses continued from the previous fiscal year.

- "Endowed lab. Innovation Management Science" at Kyoto University
- "Data Entrepreneur Program (IT innovation human resource development programs for data science and new business)" at the University of Electro-Communications
- "Hands-on training program for the development of young entrepreneurs" at the University of Tokyo
- "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 (new)
- "Microbial dark matter resource use and biochemical engineering" at the University of Tsukuba (new)

For the program to support academic and research activities, we received 166 applications. Out of them, we have selected 28 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\*.

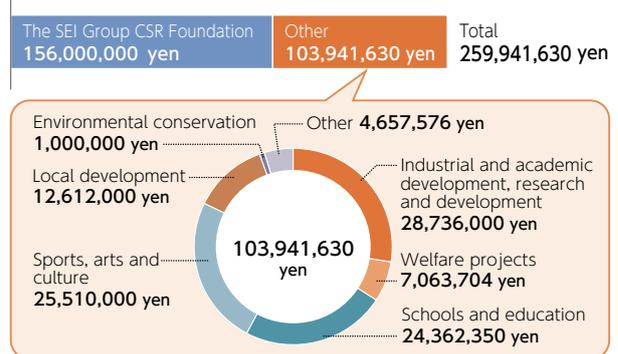
## Social Contribution through Donations

We are making social contribution through donations from a global perspective

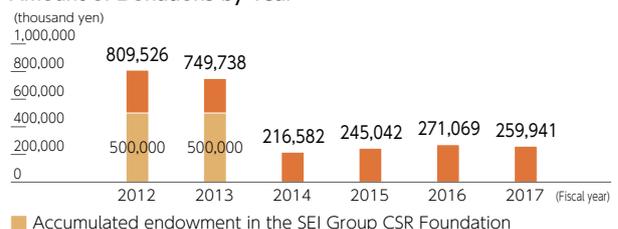
In fiscal 2017, we made donations in various areas including schools and education, industrial and academic development, R&D, art and culture, welfare, local development, environmental conservation and sports. For example, we gave financial support to symphony orchestras and opera performance as part 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, WWF Japan. In addition, we provided financial assistance for the relocation of Osaka Suita House, which are accommodations for the families of critically ill children hospitalized in the National Cerebral and Cardiovascular Center. 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.



Based on the principle of “Harmony with the International Community” set forth in the Sumitomo Electric Group Charter of Corporate Behavior, the Sumitomo Electric Group, which has presence in more than 40 countries and regions around the world, aims to contribute to development of local economy and society while respecting the culture and customs of every region and country. To this end, along with social contribution through business activities, we are committed to various activities to support local communities and build harmonious relations with them.

### Activities in Japan

A total of 54 companies of Sumitomo Electric and its group companies are covered. They include Sumitomo Riko Company Limited, Nissin Electric Co., Ltd. and Sumitomo Densetsu Co., Ltd., which are listed in stock exchange.

The expenditure for our corporate philanthropic activities was 776,260,000 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.

Sumiden Fine Conductors Co., Ltd.: Monthly cleanup of public roads and side ditches around the facilities\*1 and other initiatives

- Cleanup activities are performed in 34 of the 54 companies including the company mentioned above.

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

A.L.M.T. Corp.: Watch for traffic safety at three locations of the entrance of the industrial complex, the front gate of the facilities and the company’s parking lot every month and other initiatives

- Performed in 20 of the 54 companies including the company mentioned above.

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

Sumitomo (SEI) Electronic Wire, Inc.: Opening gyms and tennis courts to local residents and other initiatives

- Performed in 12 of the 54 companies including the company mentioned above.

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

Osaka Works of Sumitomo Electric: Factory tour for local students in the Inari Festival held in commemoration of its foundation in April\*2

- Performed in 13 of the 54 companies including the company mentioned above.

##### Opening company sites to the public to organize events

Hokkaido Sumiden Precision Co., Ltd. and Hokkaido Electric Industries Ltd.:

Jointly organized Shibazakura Festival in May to receive about 1,000 visitors\*3

- Performed in 7 of the 54 companies including the companies mentioned above.

##### Publishing local community magazines

Osaka Works of Sumitomo Electric in July 2017 and January 2018, Itami Works in May and December 2017 and Yokohama Works in May and November 2017

#### Contributing to sports and cultural activities

##### Contributing to sports activities

Sumitomo Electric: Sponsoring the 73rd Lake Biwa Mainichi Marathon in March 2018

In Itami Works of Sumitomo Electric, organizing athletic practice sessions for elementary school and junior high school students (a total of 18 sessions including those jointly organized with Itami City received 2,395 participants in total)\*4

- Performed in 11 of the 54 companies including the company mentioned above.

##### Contributing to arts and cultural activities

Sumitomo Electric Intellectual Property & Technology Center, Ltd.: Participation of employees as staff of the secretariat of Giving Art to Museums (an organization working to donate artworks to public museums; <http://www.art-okuru.org>) and other initiatives

- Performed in 7 of the 54 companies including the company mentioned above.

#### Supporting education and training

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

Tokai Sumiden Precision Co., Ltd.: Receiving local elementary school students for a work experience program in November\*5

- Performed in 22 of the 54 companies including the company mentioned above.

##### Sending lecturers and holding on-site seminars

Nissin Electric Co., Ltd. and Nippon ITF, Inc.: Jointly sending lecturers to an elementary school for a science class in July\*6 and offering other support

- Performed in 3 of the 54 companies including the companies mentioned above.

### Activities in other countries

##### Donations of money and goods to local schools and communities

Sumitomo Electric Bordnetze GmbH: Donation of IT equipment and school supplies to fourth-grade students of a local secondary school in Moldova in May\*7



Local cleaning activities\*1



Inspection tour for local children in the Inari Festival\*2



Jointly organized Shibazakura Festival\*3



Athletic lessons for elementary and junior high school students\*4



Work experience program for elementary school students\*5



Dispatch of lecturers to an elementary school for a science class\*6



Donation of school supplies and other goods in Moldova\*7

### We strive for the maintenance and improvement of product quality and thorough compliance for "Enhancement of Manufacturing Capabilities"

Scandals on quality data falsification by Japanese companies occurred in succession in 2017 and raised concerns about corporate compliance. This reminded me that, along with the maintenance and improvement of product quality, thorough compliance with laws and rules is an absolute foundation for the development of companies. The quality management staff of the Sumitomo Electric Group work not only to establish a mechanism that prevents defective products but also to respond to illicit acts as well as risks of generating illicit acts.

In our commitment to VISION 2017, we promoted Own Process Quality Assurance Activities, which sought to achieve zero defects on the design and planning stage, and newly established the Sumitomo Electric Group Quality Management Global Standards, which serve as the constitution for quality in our Group and have been introduced on a global scale. In addition, we have thoroughly provided quality education to all managers involved in manufacturing.

While a target for VISION 2022 is "Enhancement of Manufacturing Capabilities," quality management is positioned as an important component of it. VISION 2022 sets a numerical target of reducing complaint incidence by 30% from the fiscal 2017 level. By responding to each defect with effective countermeasures to prevent its recurrence, we will work to enhance quality management.



**Yoshinori Makio**  
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.

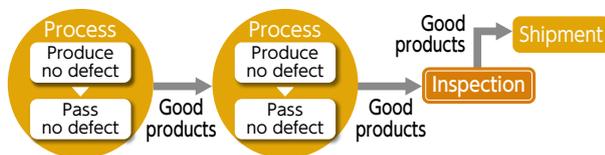


QR-1 campaign logo  
QR: Quality & Reliability

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

### Enhancement of "Quality Management Education"

#### Quality Management Education is developed throughout the Group including overseas companies 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 P57 for details) to improve and ensure the quality of products and services at higher levels. In fiscal 2014, we started a new quality management training course on a nomination base for managers in charge of product development, design, manufacturing and quality assurance, and have since worked to meet the target of providing the training to all managers who are required to take it. Eventually, by the end of fiscal 2017, the course was taken by 1,141 persons, which represented 95% of the managers who are required to take it in Japan.

We 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 Quality Management Committee in China, as opportunities to organize exchanges of information on model cases, and provided training sessions on Own Process Quality Assurance Activities. In fiscal 2017, a total of 6,855 persons, including overseas employees, completed Quality Management Education programs. The cumulative number of the persons who participated in the programs since fiscal 2010 has reached 38,111. We will continue to develop the culture of quality first through various quality management 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 key-personnel (engineers) who are to drive manufacturing innovation.

##### \*GKP

Abbreviation of "GENBA-KAIZEN professional training Program" that is the practical training program to develop key-personnel who are to promote shop-floor improvement.

## Global Quality Management System Audits

We conducted audits of 99 Japanese bases and 36 overseas bases by fiscal 2017

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 99 sites in total in Japan. Our domestic facilities are currently undergoing the fourth round of the audits, and progress in improvement is seen as the audits are repeated. The divisions that have proceeded with alignment with the Quality Management Global Standards tend to receive fewer complaints. The audits are repeated with the aim of promoting continuous improvement of the quality assurance system. Overseas, the audits were conducted in a total of 36 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.

## Monozukuri Technology Improvement Activities

We promote manufacturing strengthening activities based on Own Process Quality Assurance activities and SEI's Just-In-Time approach

The Sumitomo Electric Group conducts business operations in five business segments, and the types of its products and production systems are wide ranging. Irrespective of type, we should meet various customer needs, produce top quality products sought by customers in a safe and environmentally friendly production system with the shortest lead time and deliver them to customers in a reliable and timely manner. This is the ideal manufacturing in SEIPS.\*

To this end, we will pursue Own Process Quality Assurance activities and SEI's Just-In-Time approach as the two main pillars to identify problems, thoroughly eliminate overburden, waste and irregularity, establish a structure of continuous improvement and become a company with the highest competitiveness in manufacturing.

### ① Pursuit of Own Process Quality Assurance activities:

We will make continuous efforts to ensure quality in the processes and prevent defects from being produced or passed down to the following process in each process

### ② Pursuit of Sumitomo Electric's Just-In-Time approach:

We will make continuous efforts to pursue just-in-time manufacturing by producing what is needed in the right quantity and right timing.

While our Group adopts a wide range of systems and methods to produce various types of products, they all head in the same direction to further evolve and deepen them.

## 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 give feedback based on surveys of superiors and subordinates at an annual group training session to encourage management staff to take the initiative in making changes and to ensure CS improvement.

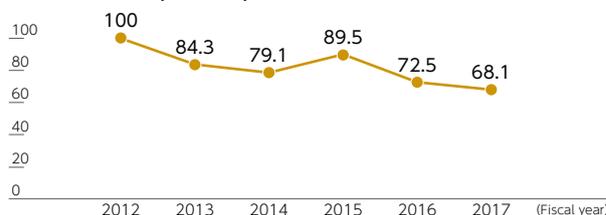
To further increase customer satisfaction and strengthen the Sales Group as a whole in response to progress in globalization, we will make use of the opinions of stakeholders collected through our visits to customers, trade fairs, websites and other means for our future initiatives.

## 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 30% from the figure in fiscal 2012. However, there are still many issues to be improved. 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.

Number of Complaints by Year (results in 2012 = 100)



(Note) The data cover Sumitomo Electric and its manufacturing affiliates in Japan and overseas (including the Sumitomo Wiring Systems Group)

## 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 today. Compliance with laws and rules is an absolute foundation for companies to be trusted and respected by society and grow in a sustainable

manner. In this context, the Sumitomo Electric Group takes the measures mentioned below for 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 data falsification and, improper inspection, we have formulated new internal rules on the prevention of quality data falsification and incorporated them into the standards. In the meantime, while our Group has already provided employees with position-based training on compliance, we will also add a course on the prevention of quality data falsification to the curriculum to make all employees recognize the necessity and importance of 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 will add the prevention of quality data falsification to the inspection items of the self-examination to ensure that quality data falsification is eliminated 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”<sup>(note)</sup>, 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”<sup>(note)</sup> 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.

The Sumitomo Electric Group also has the Chemical Management Task Committee in place to enhance coordination within the Group.



(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 already discontinued the direct use of the four types of phthalates to be banned by the RoHS Directive from 2019 in our products by the end of fiscal 2017 in advance. We are also making efforts to avoid the use of these substances in the parts to be used in our products through cooperation with suppliers.

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.

### We will work to establish a healthy supply chain in cooperation with suppliers

When we formulated the CSR Procurement Guidelines in 2010, we experienced difficulties in disseminating them at first because of insufficient understanding of the significance of CSR procurement even in the company. But CSR procurement has become a crucial indicator of the maturity of the supply chain.

Sumitomo Electric has been supported by many excellent suppliers in its history of 120 years in Japan. I believe that the objective of CSR procurement is to reconfirm the healthy trade relations with those suppliers and establish a win-win relationship.

To this end, it is necessary for the entire group to work together to implement initiatives. We are making continuous efforts to cooperate with suppliers by, for example, explaining the concept of CSR procurement face-to-face even to small suppliers. It is key not to regard CSR procurement as something special but to disseminate it as daily activities.

In line with the ongoing globalization, our supply chain keeps expanding and becoming more complicated. We sometimes have talks with suppliers that had few opportunities to engage in CSR procurement before. Also covering those overseas sites, we would like to endeavor to continuously promote CSR procurement.



**Kazuo Okami**  
General Manager, 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 and composed of the staff in charge of procurement in 22 divisions and Group companies.

Specifically, the office members 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.

## 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 a self-evaluation questionnaire survey of suppliers on CSR and also promote improvement activities in full coordination with suppliers.

As shown in the table on the right, we have gradually expanded the scope of the questionnaire survey since its start in fiscal 2013 to include Japanese and overseas suppliers of the divisions and affiliates of Sumitomo Electric. In fiscal 2017, approximately 850 companies in Japan and overseas cooperated with the survey and we interviewed 86 of them concerning especially important items and asked them to enhance compliance, information management and other relevant activities.

From fiscal 2018, we will strive for coordination with Group companies, in addition to further improvement of the conventional activities, to meet the target of "Promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement."

### 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 Response to the Issue of Conflict Minerals)
8. Disclosure of Information and Promotion of Communication with Society
9. Maintenance of Confidentiality and Information Security

### Future initiatives based on the activities from fiscal 2013 to fiscal 2017

2013 to 2016	<ul style="list-style-type: none"> <li>Establishment and dissemination of the CSR Procurement Guidelines</li> <li>CSR procurement self-evaluation questionnaire survey of a total of approximately 1,930 suppliers</li> </ul>
2017	<ul style="list-style-type: none"> <li>CSR procurement self-evaluation questionnaire survey of approximately 850 suppliers in Japan and overseas</li> <li>Interview with 86 suppliers to ask for improvement</li> </ul>
2018 to 2022	<ul style="list-style-type: none"> <li>Promotion of CSR procurement covering the suppliers that represent 90% of the value of our domestic procurement</li> <li>Gradual expansion to include major overseas suppliers</li> </ul>

### ◆◆ CSR VOICE ◆◆

Connecting people and people, technology and technology, we will strongly contribute to society through our main business



Mr. Tsutomu Nishikawa, Manager of Osaka Branch  
Mr. Ko Fujii, Head of Sales Section II  
Takebishi Corporation

Since its foundation in 1926, Takebishi has dealt in electric and electronic devices for industrial use, mainly the products of Mitsubishi Electric Corporation, as a technological trading company primarily based in Kyoto and Shiga prefectures. While the commitment of companies to the SDGs attracts public attention, we have presented solutions to social challenges in our mid-term vision "T-Link1000," which was announced in June 2018, including the expansion of our medical business to address the hyper-aged society, as well as the expansion of our environmental business for the post-carbon society. We have also revealed our initiatives that are conscious of CSV. It is our joy and mission to solve social challenges based on our corporate philosophy of "Connecting people and people, technology and technology, with trust to create a bright future." We believe that the diversification of our activities will give us business opportunities.

We are aware that CSR procurement is a foundation for ensuring our healthy relations with the partner companies that have established a win-win relationship with us. We consider that, in addition to the exchanges in the CSR procurement questionnaire survey, our abilities to "connect," which is our strength in business, will contribute to the entire society through procurement.

We started business with Sumitomo Electric in 1972 and provided services such as the organization of training sessions on FA systems\* for overseas facilities and the introduction of local suppliers. We now propose IoT and AI-based total solutions to meet demand for the use of robots for automation as well as inspection and measurement. We would like to establish and maintain a good partnership with the Sumitomo Electric Group and work to help solve social problems.

## 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, 58 suppliers have applied for the system and 44 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.

## Response to the Issue of Conflict Minerals

### We recognize this issue as a major social challenge and aim to eliminate conflict minerals from our business

As an initiative for promoting compliance-based procurement activities, the Sumitomo Electric Group recognizes that the matter of conflict minerals from Congo and its neighboring countries is a serious social issue in the supply chain. To fulfill our social responsibility in procurement activities, we aim to procure or use no conflict minerals involving any illegal or dishonest acts. To this end, we also stipulate the approaches to the initiatives in the CSR Procurement Guidelines and investigate the supply chain on conflict minerals. In the event that the use of minerals that may cause a social problem or serve as 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.

## 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. To minimize the impact of such suspension on our production and enable quick recovery, we have examined alternative suppliers and products, in addition to replacement with commodity items. We have also developed a communication network, as well as a system where information on production and logistics bases can be

re-collected and updated on a real-time basis, in cooperation with suppliers so that we can know the impact of disaster in a short time and find any sites where we can manufacture or store the products in the affected area at the time of disaster.

In fiscal 2017, we had fears of a supply shortfall due to Kyushu deluge, troubles in the production lines at plants of chemical manufacturers in Japan and other countries, suspension of operation caused by fire and other reasons and cases on quality data falsification. 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, receiving supply preferentially with the cooperation of our suppliers and promptly investigating the products for which quality data were falsified. These incidents reminded us of the significance of such activities.

We will maintain these activities to strengthen our procurement system that can supply products and services in a stable manner.

## Organization of Partners' Meetings

### Ninety-six 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 were also held in some of the divisions and Group companies in Japan, as well as some overseas facilities, in order to disseminate CSR procurement on Group-wide and global scales.



Partners' Meetings

## 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 2017 to confirm compliance with the rules as mentioned in the table below.

#### Inspection results

Subcontract Proceeds Act	In Japan: 3 division of Sumitomo Electric, 4 affiliates
Internal Control	In Japan: 3 division of Sumitomo Electric, 4 affiliates Overseas: 17 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. The inspection of Sumitomo Electric and domestic affiliates in Japan aimed to confirm compliance with the Subcontract Proceeds Act, the Customs Law and internal control rules. For inspection on the Subcontract Proceeds Act and internal control rules, we selected the target sites on the assumption of regular visits to them in the future. With respect to the Customs Law, all of the sections importing directly from overseas were inspected to check the correctness of the amounts in custom reports, and we gave guidance on revisions of the Customs Law and other laws.

In fiscal 2017, Hitachi Works received on-site investigation by the Small and Medium Enterprise Agency of Japan concerning compliance with the Subcontract Proceeds Act and other issues, which was completed with no indication of particularly major issues.

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

## Education System

### We organize training seminars to improve procurement skills on Group-wide and global scales

While Procurement Compliance Training Seminars have been organized for Production Group and Corporate Staff Group every year, we newly organized the seminars for R&D Group in fiscal 2017.

The content of the training seminars for Production Group and Corporate Staff Group was significantly revised to further enhance the understanding among the attendants. The seminars were organized as delivery lectures and as training via a video conference system, attended by many Group employees as shown in the table below. To further enhance the awareness of compliance related to the procurement of materials within our Group, we will continue to organize training seminars in a way that more Group employees can attend them.

Training seminars for R&D Group were launched to ensure that researchers can not only learn the procedures to obtain necessary materials and other items for R&D activities but also 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"> <li>Organized in 29 regions (video conference: 7 regions; delivery lecture: 22 regions)</li> <li>Attended by 1,786 persons</li> <li>Themes: Subcontract Proceeds Act, Customs Law and internal control</li> </ul>
R&D Group	<ul style="list-style-type: none"> <li>Organized in 3 regions</li> <li>Attended by 33 persons</li> <li>Themes: Subcontract Proceeds Act, internal control and procurement for the commercialization of research outcomes</li> </ul>



Procurement Compliance Training Seminar for Production Group and Corporate Staff Group

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.

The OFF-JT program in fiscal 2017 was composed of seven courses including "procurement-related laws and regulations, and CSR Procurement," each of which was provided by an expert in the Procurement Division. The experts used textbooks they prepared, and gave lectures through teleconferences with sites in Japan and overseas. In total, 258 persons attended the lectures.

We continued to organize a training program to develop key personnel on the Subcontract Proceeds Act in fiscal 2017, and provided a certificate for 10 persons from seven affiliates who completed the program. This program develops core personnel for the establishment of an autonomous system to comply with the act in each division and company because the Subcontract Proceeds Act has to be made known widely not only in the sections in charge of procurement but also in manufacturing and development sections.

As a new initiative, we set up a training program for overseas purchasing managers in fiscal 2017 with an aim to improve our procurement capabilities on Group-wide and global scales through the development of the core personnel. The training provides 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. We will gradually expand the scope of the program and also improve the content in the next fiscal year and thereafter.



Training program to develop key personnel on the Subcontract Act

#### Results of Education

	Date	No. of courses	No. of lectures	No. of participants (total)	No. of companies
OFF-JT Education program	1st half of FY2017	7	26	133**	21
	2nd half of FY2017	7	26	125**	25
Key personnel development program	2nd half of FY2017	1	4	10	7
Training for overseas purchasing managers	2nd half of FY2017	1	1	6	6

\*\*Number of those who passed the final exam

### We will continue to actively invest in human resources, which are a base of a company

During the five-year period of VISION 2017, we promoted diversity in an effort to establish the human resources base that serves as a pillar for the sustainable growth of the Sumitomo Electric Group.

In particular, our efforts to promote the use of global human resources have been achieving significant results. At present, 35 Sumitomo Electric Group (SEG) Global Executives organize Area Committees, which are a cross-border initiative developed in four key areas of the world (Americas, Europe, Southeast Asia/Australia and Greater China), promoting activities to solve common challenges in the respective areas. We have also promoted women's empowerment through steady efforts including the active recruitment of female main career track employees and the appointment of them as managers. In recognition of these efforts, Sumitomo Electric was selected as a Nadeshiko Brand, an organization that actively promotes empowerment of women in the workforce, by the Ministry of Economy, Trade and Industry of Japan and the Tokyo Stock Exchanges, in 2017. We have also invested in health promotion initiatives since the Health Management Declaration in 2015, such as prevention of metabolic syndrome among employees, improvement of exercise habits and mental health measures, to develop a working environment where employees can work vividly over a long period.

In the coming five-year period of VISION 2022, we will accelerate the establishment of a common infrastructure for human resources and organizations on a global scale and continue to promote diversity management. In the meantime, the globalization of our business is also changing the awareness of human rights among the stakeholders. While our Group has conducted business management with respect for human rights based on the Sumitomo Spirit and the Global Human Resource Management (HRM) Policy, we will also consider the formulation of a clearer policy on human rights in response to such changes.

For occupational safety, we set equipment safety measures, develop human resources who prioritize safety and establish a culture of safety as the three main pillars. With Safety & Environment Department playing the pivotal role, we will make efforts to materialize the slogan of "Safety First."



**Kazuo Oe**  
General Manager, Human Resources Division

## 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 240,000 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 35 persons, most of whom are executives of overseas Group companies, are recognized as the 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 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 Overseas Top Executives' 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.

### Area Committees and Overseas Top Executives' Conference



\*Activities on research, risk management, PR, human resources/HR development, accounting, information system, procurement, safety & environment and production engineering. The themes for the activities are set for each region.

Support from the responsible departments of Sumitomo Electric

### 《 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. We will set up a program to have them work in Japan either as expatriation or short-term assignment. We will also 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 cultivate and promote them, we are establishing a global HR database. Business Units also hold meetings with executives 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 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 (approach), standards (mandatories) and guidelines (recommendations) on each HR-related topic. We published eight key documents in fiscal 2017. In the future, we will make steady efforts to implement released documents at each Group company and also publish documents on new topics.

## Group Global Magazine "ALL SEI"

We are committed to the promotion of communication within the Group

We deliver "ALL SEI," a periodical commonly distributed across the Group, as a communication tool for Group employees both in Japan and overseas in six languages (Japanese, English, Chinese, German, Spanish and Thai) four times a year.

This magazine conveys the Sumitomo Spirit and the Sumitomo Electric Group Corporate Principles, as well as information on our business and social contribution activities in various regions, in order to share information and cultivate a sense of unity among Group employees.

We also started to provide articles on interviews between the President of Sumitomo Electric and SEG Global Executives in fiscal 2016 to present what we expect of Group employees and our vision about them in a specific manner.



ALL SEI

## Diversity in Recruitment

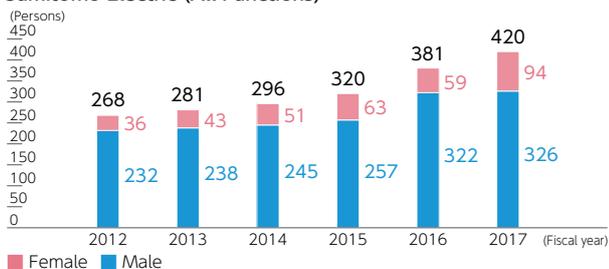
### We aim to promote diversity through recruitment of a wide range of personnel

In fiscal 2017, Sumitomo Electric employed 184 new graduates for main career track in Japan, 46 of whom were female and 5 were overseas students, etc. We also hired 99 mid-career employees. As an initiative to promote the diversity of human resources, we set a target of increasing the percentage of "global" employees, who indicate non-Japanese and graduates from overseas universities, to 10% or more and started to work to achieve the target in our activities to hire new graduates for fiscal 2017.

To support the development of our various business activities including those in new fields and global markets, as well as to promote women's empowerment, we continue to actively recruit women, non-Japanese, students from foreign countries, mid-career employees and other diverse personnel.

To ensure that diverse talents can demonstrate their capabilities regardless of nationality, race, gender, age or other background in the Group, we will continuously offer various training opportunities for human resource development and promote the deployment and appointment of diverse personnel throughout the Group to give them a wide range of career opportunities.

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



### Number of Employees Working for Sumitomo Electric Who Were International Students



(Note 1) Employees who have obtained Japanese nationality or permanent residency are excluded.

(Note 2) Above graphs cover personnel data for Sumitomo Electric employees, including those on loan to Sumitomo Electric affiliates and other organizations.

## 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

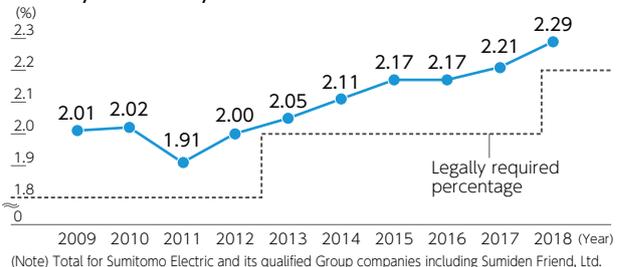
and production of buffer materials for packaging, Sumiden Friend has expanded its operations gradually to also engage in conversion of drawings and other paper documents into electronic files and shredding and recycling of waste paper. We also established Yokohama Branch in 2013, Tokyo Branch in 2014 and Osaka Branch in 2015 to promote activities in the respective areas. As of June 30, 2018, 87 employees are working at the company, including 54 persons with disabilities. As a result, the overall employment rate of the physically or mentally disabled for Sumitomo Electric and its qualified Group companies including Sumiden Friend, Ltd. (eight companies in total) was 2.29% in June 2018.

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

	2011	2012	2013	2014	2015	2016	2017	2018
The disabled	12	12	20	28	33	39	45	54

(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 Co., Ltd. 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 2017 to facilitate their coordination.

For further promotion on a Group-wide scale in the future, we established a team to promote the employment of persons with physical or mental disabilities within the Human Resources Division of Sumitomo Electric in January 2018. We will 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 can achieve and maintain the legally required percentage and respond to environmental changes such as legal revisions.

## 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 March 2016.

## ● Targets and results of the action plan for the 1st phase

### ■ Period

2 years from April 1, 2016 to March 31, 2018

### ■ Targets and results

Category	Targets		Result	Achieved
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%	○ ○

## ● Establishment of the action plan for the 2nd phase

### ■ Period

2 years from April 1, 2018 to March 31, 2020

### ■ Targets

Category	Targets	
Recruitment	Women's share in the new graduates for main career track	Clerical staff: 40% or more Technical staff: 15% or more
Appointment	Women's share in assistant managers or higher positions	Section managers or higher positions: 2.0% or more Assistant managers: 13% or more

### ■ Initiatives

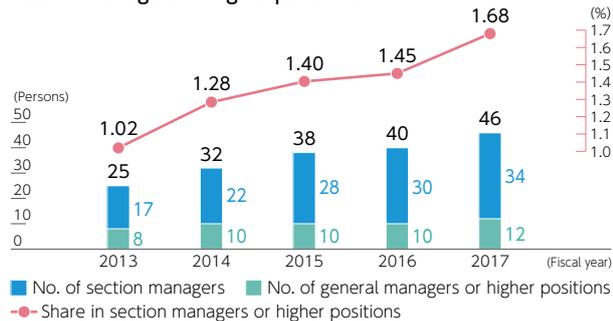
#### (Recruitment)

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

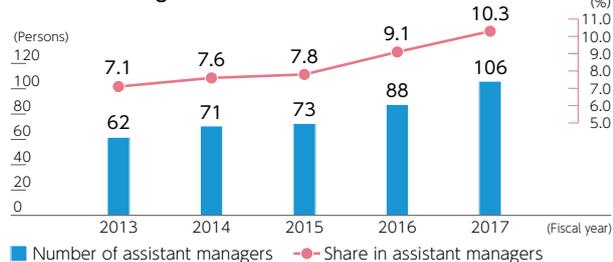
#### (Appointment)

- Implementation of measures to support female employees on main career track in their career development
- Active development and appointment of competent and enthusiastic female employees on general track
- Monitoring of promotion of women in each division
- Establishment of a network of employees that responds to diversity
- Realization of flexible work styles

Number and share of women in section managers or higher positions as of January 16 of each fiscal year



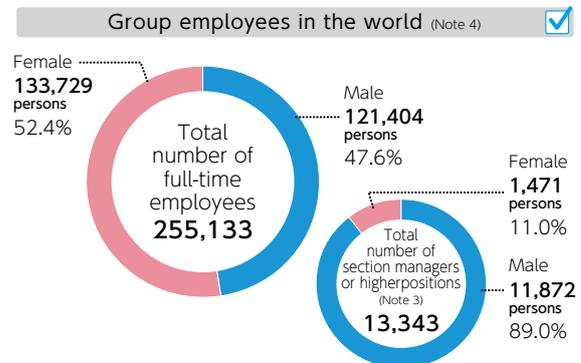
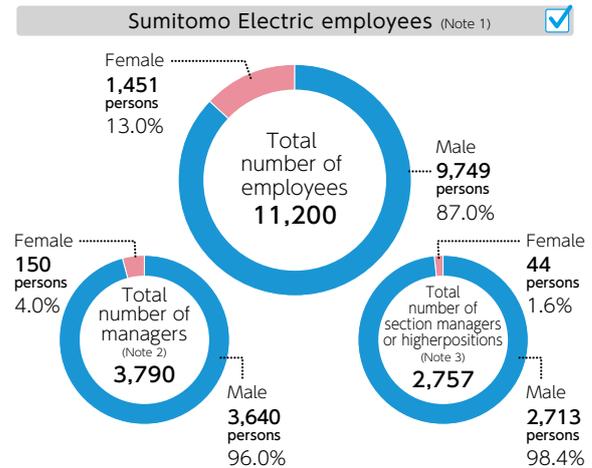
Number and Share of Women in Assistant Managers as of January 16 of each fiscal year (%)



(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

As of March 31 of 2017



(Note 1) Above graphs cover data for Sumitomo Electric employees, including those on loan to Sumitomo Electric affiliates and other organizations.  
 (Note 2) Managers: assistant managers, section managers, division managers and management  
 (Note 3) Section managers or higher positions: section managers, division managers and management  
 (Note 4) Sumitomo Electric and its consolidated subsidiaries

## 《 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.

## 《 Support of Career Development 》

In comparison with men, women are more susceptible to life events and have fewer role models. Accordingly, women tend to have difficulty in imagining their career path at present, which is also due to the impact of monoculture in organizations. In 2016, we launched a training program to develop female main career track employees. This program gives lessons to the superiors of female main career track employees to understand the necessity and importance of developing female subordinates and consider suitable support for the growth of each of them with recognition of the existence of stereotypical views on female subordinates. We also set up a training program to raise the awareness of female employees on general track and their superiors in 2017, with an aim to release the potential of the female employees and thereby further strengthen the workforce of the organization as a whole. We will continue to improve diversity management and strive to create workplaces where women and various other human resources can work lively.

## 《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.



## 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 Co., Ltd. and Nissin Electric Co., Ltd. in 2016. This group provides female employees of the Sumitomo Electric Group with opportunities for mutual study and networking across the companies to cultivate female employees and improve their skills and to assist women in playing active roles on a Group-wide scale.

In fiscal 2017, we held a forum attended by about 70 female employees on general track from 11 Group companies. With the theme of showing the abilities of the workplace to the fullest, the forum included a panel discussion by a representative from each of Sumitomo Electric, Sumitomo Wiring Systems, Ltd. and Sumitomo Riko Co., Ltd. as well as a group discussion about the creation of the best and strongest team. Such exchange with female workers from other companies gave the attendants an opportunity to widen their views and consider how to address their jobs.

### ◆◆ CSR VOICE ◆◆

#### Career development while raising children

**Kayo Hashizume**  
Assistant Manager, Circuit Process Group,  
Circuit Technology Department,  
Energy and Electronics Materials Laboratory

I am working for research and development using the short-time work system to raise a boy who is a 1st-grade elementary school student and a two-year-old boy.

When I returned to work from childcare leave, I worried about the availability of a daycare center to leave my children and what job I could do. As for the daycare center, I was able to leave them to the internal child care center of Osaka Works using the quota for an early return to work (system to give priority to a child less than one year old for using the center). For my job, I attended the training program to develop female main career track employees, which gave me an opportunity to think about my career deeply together with my boss and allowed me to imagine my potential and the specific figure that I want to be. I still have a dialogue with the boss regularly after the training.

While I already recognized that the Company has well-developed systems, I suppose that employees are provided with opportunities to explore how to use their abilities and play their role together with their superiors. With a sense of security that I can consult with my boss or other people around me, I will continue to do my best to contribute to the Company while raising children.



## Work style reforms

**We promote company-wide campaigns with the aim of ensuring that employees can achieve the proper balance between work and life**

To win the global competition in the future, it is important to create a workplace that allows diverse staff to work comfortably. Sumitomo Electric launched a company-wide three-year campaign called SWITCH Campaign in 2008 to conduct various initiatives including the promotion of work styles that balance work and life and the review of the operations of each division to improve the efficiency. Since then, while changing the name to SWITCH Plus Campaign and then SWITCH 17 Campaign, we have worked for various themes centering on the initial activities. We now place particular emphasis on work style reforms and conduct both company-wide and division-specific initiatives to reduce total annual working hours, encourage employees to take paid holidays and improve the work efficiency and productivity.

With respect to working hours, we set quantitative company-wide targets of reducing total annual working hours to the range from 1,900 to 1,999 hours in a year and increasing the average number of paid holidays taken by an employee in a year to 15 days or more in 2017. The divisions also set their own targets and worked to meet them individually. As a result, we achieved the company-wide targets.

We also introduced a system of paid holidays that can be taken by the hour in 2018 with an aim to establish a mechanism that meets various needs including those for child rearing, provision of nursing care and a visit to a hospital and allows employees to balance their work and life. We have also re-examined the upper limit of overtime based on an agreement under Article 36 and also worked to prevent overwork through education of managers on working hours and other activities.

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 set the slogan of "Be brave to change, be serious to work and be patient to continue" and 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.

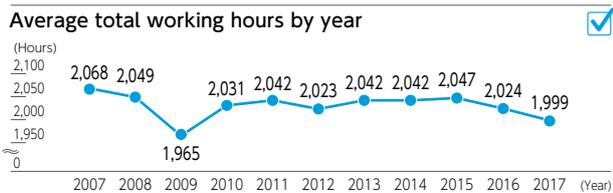
#### Average Overtime Hours and Average Number of Paid Holidays Taken by Employees by Year



Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average overtime hours per month	22.1 hours	21.0 hours	14.2 hours	19.1 hours	20.5 hours	18.6 hours	19.3 hours	20.4 hours	20.8 hours	20.2 hours	19.3 hours
Average number of paid holidays taken by employees per year	11.4 days	12.1 days	12.4 days	11.5 days	12.3 days	11.7 days	10.4 days	12.1 days	12.1 days	14.1 days	16.0 days

(Note 1) Average among labor union members of Sumitomo Electric

(Note 2) The data are based on January to December in 2017.



(Note 1) The graph above covers personnel data for Sumitomo Electric employees (including those on loan to Sumitomo Electric affiliates and other organizations within the facilities).  
 (Note 2) The data are based on January to December in 2017.

## Implementation of the Survey to Create a Lively Working Environment

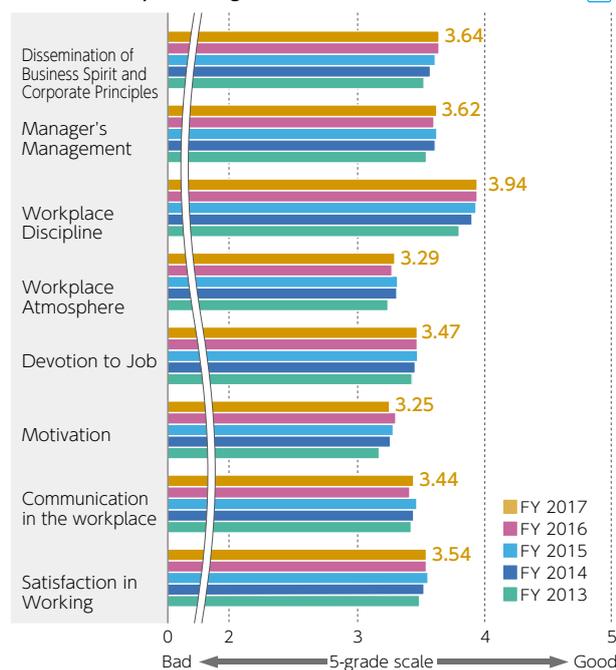
**We have added questions about dissemination and sharing of the mid-term management plan for a better understanding of the current situation of each workplace**

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 2017 as well, about 23,000 employees were surveyed in October and November, including those of Group companies. Some overseas Group companies were also covered by the survey from fiscal 2015.

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 "Motivation" and we have designed and implemented personnel measures or training to respond to them. The survey results are also fed back to the responsible person in each organization to encourage each workplace to consider specific measures against the issues, such as strengthening of dialogue and transmission of the top message, and promote activities for improvement.

We also set questions that respond to the problems recognized in the respective years. In fiscal 2017, we surveyed the degree of penetration and effect of the measures to promote health and productivity management and used the results to review our health-related programs.

### Results of the Survey to Create a Lively Working Environment



## 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 in specific functions from different sections directly 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 reform, as well as those specific to their functions, and share such problems to seek clues and solve them. The meetings also provide the participants with opportunities to listen directly to the policies of the Company and opinions of executives and to help them create networks with employees in other divisions who are close in age.

Specifically, we organized the town meetings for section chiefs and deputy section chiefs in production sites at Itami Works, for managers and main career track employees at Tokyo Head Office, Chubu District Office and Kanto Works and for employees on general track at Osaka Head Office and Tokyo Head Office in fiscal 2017. We also held town meetings for mid-career workers and employees of various nationalities at Osaka Head Office and Yokohama Works to have talks with employees with diverse career backgrounds. The opinions and other comments presented in the town 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.

## Sumitomo Electric Group Health Management Declaration

We will further promote the maintenance and improvement of employees' health to realize health and productivity management\* in cooperation with the Health Insurance Society

The Sumitomo Electric Group cannot achieve sustainable development or growth without the health of each employee. Having announced the Sumitomo Electric Group Health Management Declaration in 2015, we position the human resources base as one of the most important management resources for the sustainable development and growth of a company. We will actively assist employees in developing their health and work to establish a lively workplace through the organization of in-house sports events and other initiatives.

### 《Launch of "Kenkatsu!"\* Health Maintenance and Improvement Activities》

We launched activities for the maintenance and improvement of employees' health called "Kenkatsu!" in June 2017 and have conducted initiatives including walking events, subsidization of fitness gym memberships, organization of exercise experience seminars and moderate and responsible drinking/quitting smoking seminars, measures to prevent passive smoking and mental health measures. We also organized Health Festa, as well as athletic practice sessions with current and previous members of our athletics club, to help employees, their family members and local people promote their health. In December 2017, we created Kenkatsu! webpages in our internal website to diffuse the basic knowledge of health and productivity management, enhance awareness of health among employees and promote Kenkatsu! activities.

### 《Initiatives to Prevent and Improve Metabolic Syndrome》

These initiatives mainly aim to improve the eating and exercise habits of employees. As an initiative to improve their eating habits, we organized a seminar on moderate and responsible drinking and 59% of the 427 participants now follow the advice including having two or more alcohol-free days a week and moderation of drinking. We also jointly organized a seminar on quitting smoking and 21% of the participants now work on it. In the future, we will enhance special health guidance, which has been given conventionally, to reduce the employees who have symptoms of metabolic syndrome.

To improve the exercise habits of employees, we organized a walking event to set and achieve a target of walking 8,000 steps in a day for three months. This event was held twice and joined by 3,126 persons in total. We also introduced a system to subsidize fitness gym memberships and have received 2,125 applications. In June 2017 and January 2018, we invited trainers from RIZAP, a major fitness gym chain, to organize a "Sumitomo Electric & RIZAP exercise habit seminar" to receive 410 participants.



Sumitomo Electric & RIZAP exercise habit seminar

### 《Prevention of Passive Smoking》

We are working to close our indoor smoking areas in principle by the end of March 2019 and have closed 108 of them as of March 2018. We also established a day to encourage employees to quit smoking and stopped selling cigarettes in our facilities in March 2018. Through these initiatives and other efforts, we aim to create a working environment with no passive smoking.

### 《Mental Health》

Sumitomo Electric is committed to dissemination of basic knowledge regarding mental health care through distribution of a related handbook and supply of relevant information on the corporate website and in-house magazines. We also work to manage mental health care for employees on a company-wide scale by providing "self-care" training to encourage employees to pay attention to any signs of their own mental health problems, which was taken by 605 persons, as well as "care by supervisor" training for management level employees, which was taken by 316 persons. In addition, we station counselors at operating sites and external counselors with whom family members of employees can also consult.

In the future, we will conduct working environment improvement activities (named "workplace health checkup") based on the results of stress level tests to create a more comfortable workplace.

### 《Contribution to Sports Activities》

With the current and former members of our athletics club serving as lecturers, we organized an athletic practice session for employees and their family members as well as elementary school, junior high school and high school students and local runners twice and a total of 181 persons joined the sessions. Starting with warm-up exercises, the participants received lessons suitable for the level of each of them to learn the joy of running and improve their running abilities. Going forward, in addition to Health Festa, which is also joined by local residents, we will work to organize company-wide sports matches between internal sports clubs and circles, as well as sports academies with experts, in order to develop a sense of unity in each worksite, involve more people in sports activities and improve exercise habits.

### 《External Assessment》

#### ● Certification as the "White 500"

The Ministry of Economy, Trade and Industry of Japan has established a system to certify organizations engaging in strategic efforts for the health management of employees from a management perspective jointly with Nippon Kenko Kaigi. Sumitomo Electric was recognized as a 2018 Certified Health and Productivity Management Organization under the Large Enterprise Category (White 500) of this system in February 2018.



We will further enhance our efforts to give health guidance and assist employees in improving their exercise habits to prevent and improve metabolic syndrome while developing various health-related initiatives to realize health and productivity management in our Group companies in Japan.

## 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 2017, we expanded the coverage of the teleworking system introduced for the employees subject to constraints on their work at various life stages (pregnancy/childbirth, child rearing and nursing care) and also provided employees with opportunities to obtain relevant information including nursing care seminars that helped understand physical and mental preparation for nursing care of family members. We thus make efforts to help employees balance work and life.



## Various Support Programs

We provide each of the employees with various types of support

### 《 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. This system allows temporary retirement in such a situation in order to prevent employees from retiring and encourage them to return to work after the leave.

### 《 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 added a third center in Itami Works in March 2009. As of March 31, 2018, these three centers take care of 52 children in total. We also established a childcare center operated jointly with other nearby companies in the neighborhood of our Tokyo Head Office in April 2018.

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.

### 《 Teleworking System 》

We introduced a teleworking system, which allows employees who face restrictions to their work due to childcare, nursing care, etc. to work at home or other locations in fiscal 2016. 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.

## Number of Users of the Employee Support Programs



FY	Employees who took childcare leave			Employees who took leave when their spouses gave birth	Employees who used the short-time work system			Enrollment in the reemployment system			Users of internal child care centers for children	Users of the volunteer holiday system
	Male	Female	Total		Male	Female	Total	Male	Female	Total		
2012	12 (10)	115 (60)	127 (70)	65	18	254	272	1	21	22	64	6
2013	15 (13)	106 (56)	121 (69)	55	21	245	266	3	23	26	62	7
2014	16 (12)	134 (54)	150 (66)	71	19	264	283	1	29	30	57	7
2015	29 (28)	124 (57)	153 (85)	92	20	276	296	1	30	31	56	9
2016	40 (25)	137 (42)	177 (67)	94	22	262	284	1	25	26	57	8
2017	52 (52)	105 (49)	157 (101)	112	19	263	282	0	23	23	52	6

The number in brackets indicates the number of the employees who took the leave for the first time in the fiscal year.

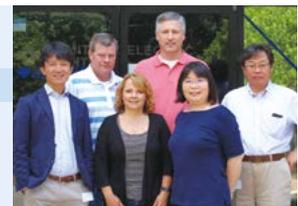
(Note) The table above covers data for Sumitomo Electric employees, including those on loan to Sumitomo Electric affiliates and other organizations.

## ◆◆ CSR VOICE ◆◆

### I used the system to take a leave to accompany my husband, who is assigned overseas

**Toshimi Suzuki** Assistant Manager, Optical Communications Laboratory (currently on leave)

When the overseas assignment of my husband was decided, I initially thought of using the reemployment system to retire once and then return to work in the form of reemployment. However, there was no guarantee to be reemployed and, most importantly, I felt uneasy about retiring from the Company for which I worked for 25 years. Just then, this system was introduced and it eliminated my concern over whether I could be reemployed or not after retirement and also allowed me to concentrate on handover in Japan and preparation for starting an overseas life. I would like to improve my language skills and learn various cultural differences to improve myself during the leave. Although women thus face a choice at each life event, I hope that the Company keeps increasing options for women to continue to work.



## Glossary

### \*Mark certifying corporate support for parenting, Kurumin

The Ministry of Health, Labor and Welfare granted this mark to Sumitomo Electric for achieving the goals set under its First Action Plan (from April 2005) to Fifth Action Plan (to March 2015) based on the Act on Advancement of Measures to Support Raising Next-Generation Children.

## 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

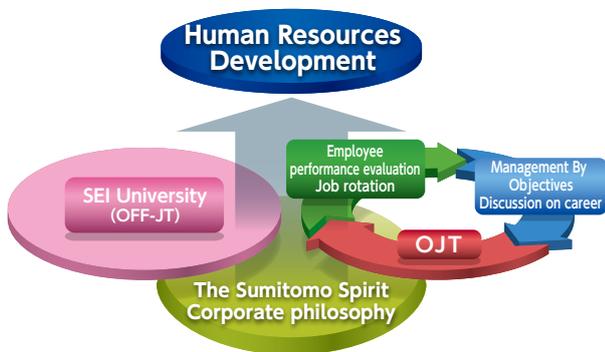
**We work to improve the value of human resources throughout the Group**

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, 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 the business. We give them opportunities to learn about it in the training programs for new employees and various position-based training programs. The pre-transfer training program provided for the employees to be assigned overseas is also designed to ensure that they can convey the Sumitomo Spirit in their own words in their new workplaces. Likewise, we are developing an environment where the Sumitomo Spirit can be learned periodically in Group companies in Japan and abroad.

Training categories of SEI University



Record of the training sessions organized across the Sumitomo Electric Group in FY 2017

Applicable employees	Total number of participants (persons)	Total length of training (hours)
Sumitomo Electric employees	61,729	358,981
Employees of Group companies in Japan	19,379	79,389
Employees of overseas Group companies	8,930	62,824
<b>Total</b>	<b>90,038</b>	<b>501,194</b>

Record of unique training sessions organized in individual Group companies in FY 2017

Applicable employees	Total number of participants (persons)	Total length of training (hours)
Domestic Group companies (24 companies)	25,548	161,735
Overseas Group companies (63 companies)	95,986	246,025
<b>Total</b>	<b>121,534</b>	<b>407,759</b>

## 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 programs for new employees, mid-career employees, newly promoted personnel and technical trainees 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

Outline of the training program:

#### 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**

Outline of the training program:

**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.

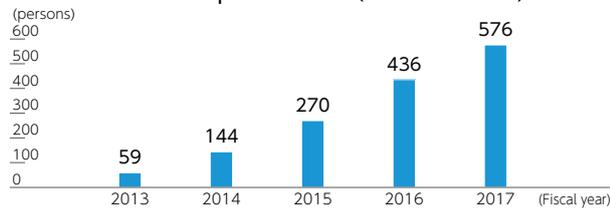
**Target: Managers**

Outline of the training program:

**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)**



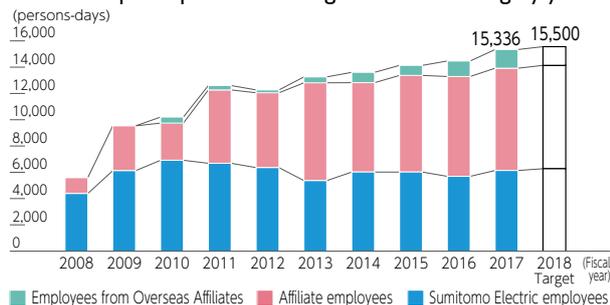
**Cultivation of Manufacturing Personnel**

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

**① Basic training on manufacturing**

The underlying concept is to learn with actual machines and products using all the five senses. Designed to deal with the latest technologies, the curriculums are wide ranging from training on SEQCDD, which are essential subjects for manufacturing, to the Group's proprietary technologies and techniques and equipment control and maintenance technologies. These programs are systematically organized and provided in a planned manner. The number of the participants is also growing every year. We have also launched a program to support Group companies in Japan by developing human resources that can serve as trainers within the respective companies so that they can organize training independently. Overseas, in China and Southeast Asia, in addition to basic training on SEQCDD, we organize training on basic maintenance of equipment on a regular basis.

**Number of participants in training on manufacturing by year**



**② Practical training**

We organize two types of practical professional training aimed at cultivating key personnel who are anticipated to drive manufacturing innovation and reinforce SEQCDD improvement, namely MKP (Monozukuri Kakushin Pro Jissen Dojo, or manufacturing innovation professionals' workshop) and GKP (Genba Kaizen Pro Jissen Dojo, or on-site improvement professionals' workshop). MKP has also been positioned as part of the program to develop plant managers since this fiscal year with an aim to improve the problem-solving skills of successors of plant managers (candidates for plant managers in the future). In both training programs, 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.

**③ Small-group activities**

Sumitomo Electric develops and promotes small-group activities (called “SGA”) to solve problems and achieve objectives voluntarily on a workplace basis with the aims of developing human resources and energizing the workplace. This initiative, launched in 1958, has been also introduced into overseas companies and expanded to involve a total of 45 thousand participants from 166 companies across the Group in working on 2,895 themes.



Training session on how to promote SGA in China

We held the Sumitomo Electric Group Small Group Activity Convention in August 2018 with the participation of 10 groups in total, consisting of six groups representing domestic divisions and four groups representing four overseas areas (Americas, Europe, China\* and ASEAN\*). To prepare for this event, a regional convention was held in each of the four overseas areas from October 2017 to May 2018. The participating companies also used the regional conventions as an opportunity to stimulate their small group activities (Group-wide kaizen activities) and to interact with other companies.

\* These groups were selected from among the representatives of the countries/regions in the area.



Award ceremony for the representing group in each regional convention

We are working to further enhance the contents of these three types of education through information exchange and interaction between planning/operations divisions and the divisions of the participants to enhance our manufacturing capabilities even more.

# To Become a Company with the Highest Level of Safety

## 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, as well as to become a company with the highest level of safety. Specifically, we have set medium- to long-term Sumitomo Electric Group Safety and Health Targets. To meet the targets, we specify priority activities and priority subjects for each fiscal year at the Health and Safety Committee, which is composed of members from management and the union.

### Sumitomo Electric Group Safety and Health Targets

1. Realizing accident-free worksites and creating comfortable working environments
2. Maintaining and improving compliance
3. Promoting employees' physical and mental health care

### Activity targets for fiscal 2017

- Serious accidents and accidents resulting in remaining disabilities: 0
- Total number of accidents resulting in lost work time, no lost work time accidents and accidents causing minor injury: 24 or less

### Priority subjects for fiscal 2017

Safety activities involving human lives with participation of all employees under the initiative of top management

#### 《Reinforcement of fundamentals in each division》

- Priority safety activities
  - ① Activities to prevent serious accidents
    - Conformity with global standards and continuous implementation of inspections
  - ② "Safety! Power OFF Activity"
    - Identification of operations involving access to any moving part without turning off the power and countermeasures
  - ③ Activities for ensuring safety in multi-worker operations
  - ④ Prevention of recurrence of similar accidents involving injury
    - Horizontal diffusion and completion of the preventive measures
- Stimulation of the bottom-up activities with a top-down approach
- Identification of daily changes and problems through the 1-2-3 activities

#### 《Strengthening of Weak Points on a Company-wide Scale》

- Global safety evaluation
  - Identification of weak points in safety management and safety activities and support of their improvement
- Emergency / priority safety management activities
  - Structural improvement based on the recognition of the weaknesses
- Plant disaster prevention activities
  - Inspection of special material gas and combustible gas facilities, electrical devices and outdoor utilities to identify any problems and assess the degree of obsolescence
- Strengthening of horizontal diffusion activities
  - Effective use of information on minor injury and serious "hiyari" (near-miss) cases
  - Measures to prevent accidents on the way to work
  - Campaign to prevent falling accidents

#### 《Promotion of Structural Reinforcement on a Company-wide Scale》

- Dissemination and application of safety global standards
  - Dissemination of Sumitomo Electric's safety standards on a global scale
- Development and training of human resources in Japan and overseas
  - Development of education to increase risk awareness
- Re-establishment of safety culture
  - Improvement of safety awareness to eliminate unsafe actions
  - Development of S-T-O-P Accident Campaign
  - Recognition of weaknesses to specify the ideal state we seek
- Strengthening of chemical management
  - Strengthening of the management of specific chemical substances and poisonous and deleterious substances
  - Cooperation with the Occupational Health and Safety Management Committee

## Examples of Priority Safety Activities

### Identification of Serious Disaster Risks

#### ■ Self inspection in the bases

We reviewed the checklist prepared to prevent serious accidents based on the analysis of such accidents that occurred in the Japanese manufacturing industry with inspection items including becoming caught in equipment, forklift-related accidents, falls and electric shocks, and newly added "Power OFF Activity" and "activities for ensuring safety in multi-worker operations" (nine categories, 70 items) to the checklist. Our bases in Japan and overseas conducted a self inspection concerning serious disaster risks in their own processes in accordance with this checklist and identified more than 10,000 issues that require countermeasures, which are currently taken for improvement.

#### ■ Local inspection (instruction to parent divisions)

With focus on the parent divisions of Business Units in charge of instruction on self inspections in the bases, we conducted local inspections that were also used to provide the parent divisions with training on confirmation and instruction methods. In fiscal 2017, a local inspection was conducted in 28 bases including all parent divisions to check the appropriateness of the risk identification and assessment activities. We will manage the risks identified through self inspections by the bases and progress of the countermeasures at the initiative of the parent divisions, and seek the thorough implementation and establishment of the countermeasures to prevent serious accidents.



## Safety Performance and Future Actions

### In fiscal 2017, the number of the accidents involving injury increased slightly from fiscal 2016

During fiscal 2017, we had a total of 42 accidents involving injury, which were broken down into 10 injuries resulting in lost work time, 25 no lost work time injuries and 7 minor injuries (excluding employees of the Sumitomo Wiring Systems Group), and thus failed to meet the target of zero serious accidents and accidents resulting in remaining disabilities and 24 or less accidents resulting in lost work time, no lost work time accidents or accidents causing minor injury. Meanwhile, there were no serious accidents for three consecutive years. We believe that this is a result of the activities to prevent serious accidents launched in the second half of fiscal 2014 as well as the priority safety activities launched in fiscal 2016, which were 1) activities to prevent serious accidents, 2) "Safety! Power OFF Activity," 3) activities for ensuring safety in multi-worker operations and 4) prevention of recurrence of similar accidents involving injury. Looking at the injuries by situation, while injuries attributed to equipment decreased from the fiscal 2016 level with the effect of disseminating the Global Standards for Equipment and the priority safety activities, injuries by inserting a hand into moving parts, by fall or by other actions of people remained unchanged or increased in fiscal 2017. It is a challenge to enhance the safety awareness of all employees. In fiscal 2018 we are making efforts to achieve a target of zero serious accidents and accidents resulting in remaining disabilities, 38 or less accidents resulting in lost work time, no lost work time accidents or accidents causing minor injury and an accident score of 216 or less, as part of our activities to "become a company with the highest level of safety." 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, and promote Power OFF Activity and other activities to prevent serious accidents.

#### 《 Initiative Using an Accident Score 》

We will introduce "accident score" as a new target index for Safety VISION 2022.

An accident score is calculated by weighting the accidents that have occurred by type. This index is established to reduce accidents for which the management and supervisory responsibility is large.

Accidents are specifically classified into:

Class 1: Accidents that society strongly demands to prevent;  
e.g.: Accidents covered by the activities to prevent serious accidents, etc.

Class 3: Accidents that can occur anywhere in social life; and  
e.g.: Falling accidents, accidents while walking normally, accidents causing backache, etc.

Class 2: Accidents other than those in Class 1 or Class 3.  
e.g.: Accidents caused by an edged tool, burr or jig, etc.

Then, a score is given according to the type and level (serious accidents/accidents resulting in remaining disabilities, accidents resulting in lost work time, no lost work time accidents, accidents causing minor injury) of the accident.

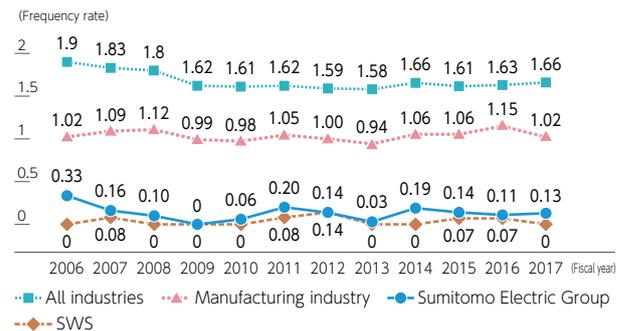
With the introduction of the accident score, we will facilitate the visualization of risk reduction.

### Accidents involving injuries

		Sumitomo Electric Group				SWS Group		Total
		Employees		Temporary worker, subcontractor	Sub total	Employees		
		Japan	Overseas			Japan	Overseas	
FY 2017	Accidents resulting in lost work time	5	3	2	10	0	4	14
	No lost work time injuries	11	10	4	25	1	10	36
	Minor injuries	3	3	1	7	3	7	17
	Total	19	16	7	42	4	21	67
FY 2016	Accidents resulting in lost work time	4	4	3	11	1	2	14
	No lost work time injuries	13	6	2	21	7	1	29
	Minor injuries	3	3	1	7	3	6	16
	Total	20	13	6	39	11	9	59

(Note) The data on employees of the Sumitomo Electric Group cover Sumitomo Electric and its 103 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 40 affiliates in Japan (excluding SWS and the other listed companies), and the frequency rate in SWS covers SWS.

There is still much more we can do.

There is no end to our environmental preservation activities.

Companies are increasingly required to promote environmental preservation activities, which are also a part of Environmental, Social and Governance (ESG) investing now.

While the Sumitomo Electric Group set the target of reducing the total amount of CO<sub>2</sub> emissions by 5% from the fiscal 2012 level in VISION 2017, the actual result was a reduction of 2.3%. Although we thus failed to meet the target, the growth of our sales by about 20% over the five years was a reason for it. We are proud of the result as an outcome of the efforts of our field staff to reduce CO<sub>2</sub> emissions per unit of sales by 4% every term in addition to our activities to lower power consumption after the Great East Japan Earthquake.

For VISION 2022, while aiming to achieve another 20% sales growth, we set a target of achieving no increase in the total amount of CO<sub>2</sub> emissions from the fiscal 2017 level. It is actually difficult to meet it because we have already taken almost all of the measures we can take. Still, we will analyze the current situation of the entire supply chain concerning the items including those of Scope 3 in the first two years of VISION 2022 (Phase 1) to establish medium- and long-term targets and strive for wide-ranging reduction activities in the last three year of VISION 2022 (Phase 2).

We also consider that there are still measures for energy saving, such as the use of waste heat and unused heat in factories. In addition to commitment to renewable energy and efforts to address water risks, we will continue to enhance our activities for energy saving.



**Nobuya Ooka**  
General Manager, Safety & Environment Department

## 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)\*

##### Basic Philosophy

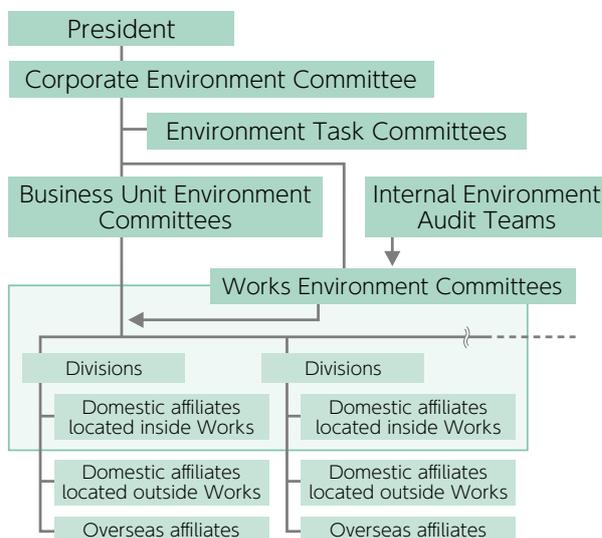
The Sumitomo Electric Group thinks it is primarily important to establish a society that is sustainable and has less environmental impact, and contributes to society by providing products and services.

##### Action Guidelines

1. Considering environmental preservation activity is one of the most important issues for corporative 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 and prevention of environmental pollution
  - Increase environmentally-conscious products and services  
Phase out of harmful substances, and implementation of product assessment and product LCA\*
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-21 Campaign

The Sumitomo Electric Group has conducted the Action ECO-21 Campaign since April 2003, focusing on environmental engineering, environmental communication and originality. We developed the Action ECO-21 (Phase VI) Campaign as a three-year plan from fiscal 2015 and will promote the Action ECO-22V Campaign from fiscal 2018.

### Targets of the Action ECO-21 (Phase VI) Campaign • Period: FY 2015 – 2017

Item	Descriptions	Targets for FY 2017	FY 2017 results	Evaluation	
Environmental efficiency	Monetary value of environmental impacts (CO <sub>2</sub> , wastes, harmful substances, NOx and SOx) / sales	Reduce 5% from FY 2012	Reduced 29%	◎	
Reduction of environmental impacts from business activities	Global warming prevention	(1) CO <sub>2</sub> emissions (in Japan and overseas): reduction of the absolute amount <sup>(Note)</sup>	Reduce 5% from FY 2012	Reduced 2.3%	△
		(2) Energy saving (production sites): reduction of energy consumption per unit of sales [Consumption in crude oil equivalent / sales]	Reduce 20% from FY 2012	Reduced 27%	○
		(3) Energy saving (offices): reduction of energy consumption per unit of floor area [Consumption in crude oil equivalent / floor area]	Reduce 5% from FY 2012	Reduced 21%	◎
		(4) Reduction of CO <sub>2</sub> in logistics: reduction of CO <sub>2</sub> per unit of sales	Reduce 5% from FY 2012	Reduced 15%	◎
	Promotion of resource conservation and recycling	(1) Reduction of the zero emission rate (in Japan)	0.3% or less	0.2%	○
		(2) Reduction of the zero emission rate (overseas)	9% or less	9.1%	▼
		(3) Amount of waste (in Japan): reduction of the absolute amount	Reduce 5% from FY 2012	Increased 16%	▼
		(4) Water use: reduction of water use per unit of sales [Water use / sales]	Reduce 5% from FY 2012	Reduced 25%	◎
	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 FY 2012	Reduced 17%	◎
	Reduction of environmental impact from products	Management of chemical substances in products	(1) Management of chemical substances in products	Ensure compliance with laws in Japan and overseas	No issues
Expansion of environmentally conscious product range		(1) "Eco Mind" products	Register 100% of new products	100%	○
		(2) Eco-products	60% of the ratio in sales (in Japan)	61%	○
		(3) Products with less CO <sub>2</sub> emissions	Contribute to reducing CO <sub>2</sub> emissions by 100 thousand tons/year	126 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)

(Note) While the calculation had been based on a fixed emission factor until fiscal 2016, the latest available emission factor was used for the calculation of results for fiscal 2017. If the same emission factor used until fiscal 2016 was applied to the calculation, the result in fiscal 2017 would be an increase of 2.3%.

### Targets of the Action ECO-22V Campaign • Period: FY 2018 – 2022

Item	Descriptions	Targets for FY 2022	Targets for FY 2018	
Reduction of environmental impacts from business activities	Global warming prevention	(1) CO <sub>2</sub> emissions (in Japan and overseas): reduction of the absolute amount	Reduce 0% from FY 2017	Reduce 0%
		(2) Energy saving (production sites): reduction of energy consumption per unit of sales [Consumption in crude oil equivalent / sales]	Reduce 5% from FY 2017	Reduce 1%
		(3) Energy saving (offices): reduction of energy consumption per unit of floor area [Consumption in crude oil equivalent / floor area]	Reduce 5% from FY 2017	Reduce 1%
		(4) Reduction of CO <sub>2</sub> in logistics: reduction of CO <sub>2</sub> per unit of sales	Reduce 5% from FY 2017	Reduce 1%
	Promotion of resource conservation and recycling	(1) Amount of waste (in Japan and overseas): reduction of the per unit amount	Reduce 5% from FY 2017	Reduce 1%
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 FY 2017	Reduce 1%	
Reduction of environmental impact from products	Expansion of environmentally conscious product range	(1) "Eco Mind" products	Register 100% of new products	100%
		(2) Eco-products	70% of the ratio in sales (in Japan)	62%
		(3) Products with less CO <sub>2</sub> emissions	Contribute to reducing CO <sub>2</sub> emissions by 150 thousand tons/year	130 thousand tons/year

# Response to Environmental Risks and Opportunities through Environmental Management

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 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

## Monitoring Based on Environmental Efficiency

In fiscal 2017, environmental efficiency was improved by 29% from the fiscal 2012 level

The Sumitomo Electric Group has adopted environmental efficiency calculated based on various environmental impacts according to LIME\* as a group-wide indicator on environmental management. The environmental efficiency was improved by 29% from the fiscal 2012 level in fiscal 2017.

### Environmental Efficiency

=Monetary value of environmental impacts (CO<sub>2</sub>, wastes, harmful substances, NOx and SOx) / Sales  
 Environmental efficiency (x10<sup>-4</sup>)



(Note) Data on CO<sub>2</sub> emissions and wastes are collected from Group companies in Japan and overseas while those on harmful substances, NOx and SOx are from Group companies in Japan only.

## 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-21 Campaign.

The managerial post-based career training program involves legal and general education on the environment. In fiscal 2014,

on-site inspection of environmental facilities to enhance sensibility in environmental management was added to the program.

We also provide technical education on chemical management and other issues on a regular basis.

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 training • Training on the management of chemical substances in products
On-site	• Training on Energy Saving Handbook • Action ECO-21

## 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

### 《 Audit Implementation Plan and Its Progress 》

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 of all manufacturing sites in Japan was started in fiscal

2008 and completed in fiscal 2011, and we have conducted the second round since fiscal 2016.

Environmental audits of manufacturing sites outside Japan were also launched in fiscal 2010. As of the end of fiscal 2017, we have completed 48 of the 50 sites subject to audits: We are now planning to audit the sites that newly joined the Group in fiscal 2018.

《Evaluation of Facilities That May Affect Water Quality》

In response to a revision of the Water Pollution Control Act 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 evaluated three sites in fiscal 2017. We will continue to conduct these audits.

《Check of the Progress in the Activities of the Action ECO-21 Campaign》

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

《Confirmation of Legal Compliance》

In fiscal 2017, any violation of laws and regulations (cases where guidance, recommendation or order to pay a fine was issued by the authority) was not reported to the Safety & Environment Department of Sumitomo Electric.

During fiscal 2017, we had a total of nine cases where an affiliate received an order to pay a fine from the relevant authority of the country/region for non-compliance in past fiscal years, which consisted of six cases in affiliates in Mexico, Taiwan and Thailand for non-compliance in fiscal 2015 and three cases in affiliates in Thailand for non-compliance in fiscal 2016. In addition, in April 2018, an affiliate in Taiwan received an order to pay a fine from the authority for non-compliance. We will continue to strive for a proper understanding of the regulations in the respective regions to ensure thorough compliance.

Environmental Accounting

	Financial items									Non-financial items	
	Investment (million yen)			Expense (million yen)			Economic effect (million yen)			Change factors in FY 2017 (in Japan)	Strategy/opportunity and risk
	2015	2016	2017	2015	2016	2017	2015	2016	2017		
Reduction of greenhouse gas (GHG) emissions	Investment in energy saving (Note 1)			/			Reduction of energy cost (Note 1)				<p>We set the reduction of 5% from the fiscal 2012 level in fiscal 2017 as the target. To achieve it, we aimed to reduce energy consumption per unit of sales by 20% from the fiscal 2012 level, and have made various energy saving efforts. These activities are also important for the reduction of energy cost, which has risen steeply in recent years. The knowledge learned through the activities is also introduced into overseas Group companies.</p>
	2,036	1,034	2,630				608	882	723		
Waste reduction	Investment in resource saving and recycling (Note 2)			Waste disposal cost (Note 3)			Sale of valuables materials (Note 3)				<p>We set the reduction of 5% from the fiscal 2012 level as the target for fiscal 2017. To reduce the amount of waste, we are promoting the conversion of waste into valuable materials. While the amount of waste increased due to the impact of the suspension of imports of recyclable waste by China, we will continue our commitment to the concentration of waste liquid as a method to reduce the amount.</p>
	210	61	18	1,037	1,175	1,294	104	127	69		
Cost of management activities	/			1,097	1,049	975	/			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	/			7	10	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	52	8	/			Restoration of contaminated soil and groundwater	We continuously restore the contaminated soil and groundwater identified in our facilities.

Boundaries of tabulation: Sumitomo Electric + domestic affiliates

(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.

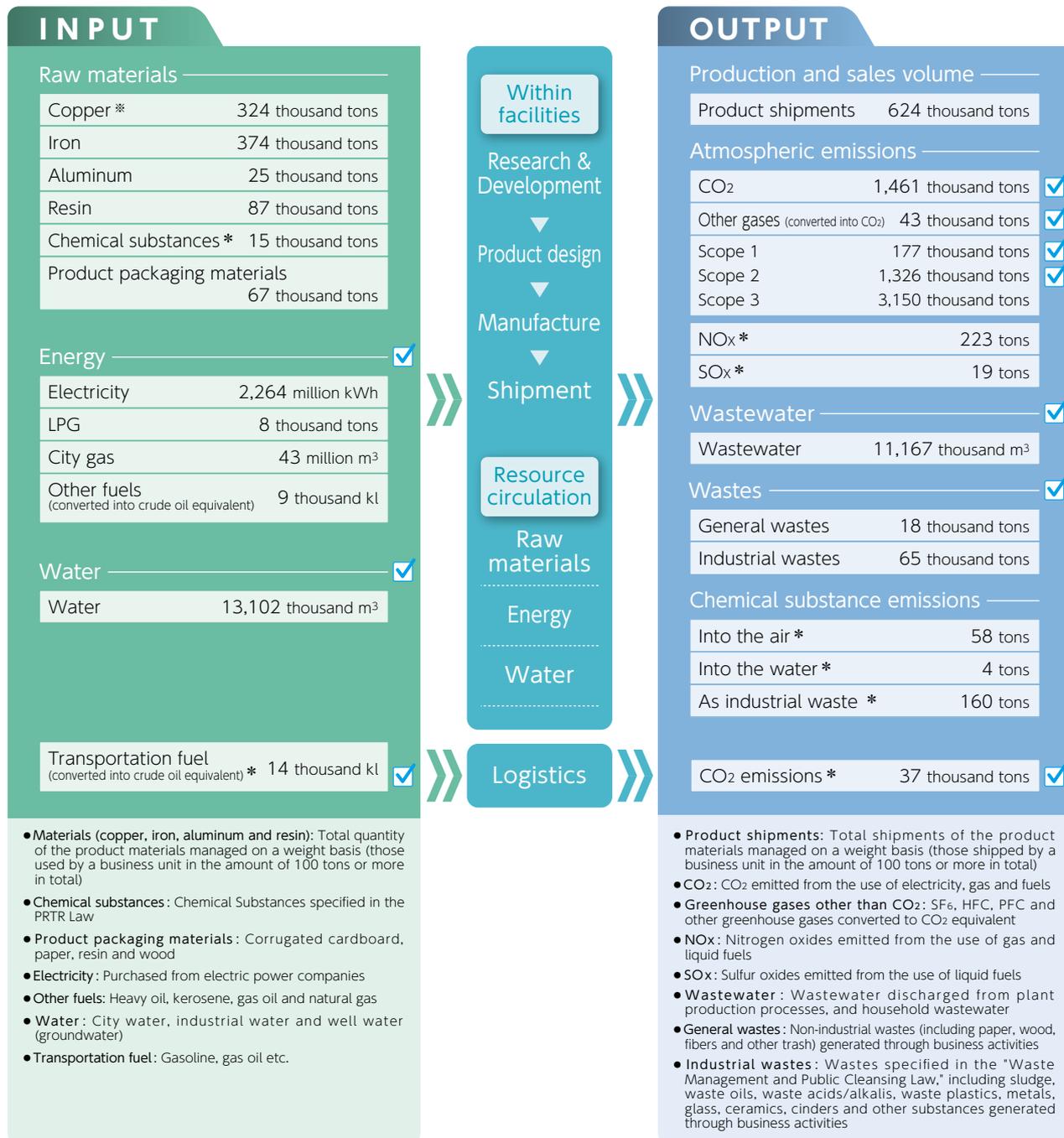
(Note 3) The cost is calculated based on payment to the waste disposal contractor. Metals are not included in the calculation of either cost or economic effect.

(Note 4) Change due to boundaries change: Emissions or amount of waste in fiscal 2016 from the boundaries of collection newly added or excluded in fiscal 2017 (no boundaries were newly added or excluded in this fiscal year).

Change due to sales change: [Emissions or amount of waste in fiscal 2016 from the boundaries of collection for fiscal 2017] x (Sales in fiscal 2017 / Sales in fiscal 2016 - 1)

Actual change: Calculated by subtraction

# Material Balance (Environmental Impacts)



Boundaries of data integration Items with \*: Sumitomo Electric + domestic affiliates; Items without \*: Sumitomo Electric + domestic and overseas affiliates

※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. and Sumitomo Densetsu 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, 1,503 thousand tons, account for the vast majority of 1,867 thousand tons, which are estimated GHG emissions from the boundaries of consolidation for financial reporting in fiscal 2017. In the meantime, out of the 248 consolidated subsidiaries excluding the 3 listed companies mentioned above, the environmental management of our Group covers 145 companies in production units (42 in Japan, 33 in China, 34 in Asia (except China), 15 in the Americas and 21 in Europe and other in fiscal 2017). The two sites of SEEV\* and SSWT\* are not covered because a data collection system is currently being established in each of them. GHG emissions from the two companies are estimated to be around 78 thousand tons, which accounts for about 5% of the total GHG emissions from the entire scope of the environmental management of our Group.

# Activities to Prevent Global Warming

## Reduction of Greenhouse Gas Emissions

Our CO<sub>2</sub> emissions decreased in Japan but grew overseas from the base year.  
We will promote energy saving activities

The Sumitomo Electric Group sets the target of reducing GHG emissions by 5% from the fiscal 2012 level in fiscal 2017 as an initiative to prevent global warming.

We have conventionally positioned the promotion of energy saving as a core target in our environmental activities and promoted it actively in our sites and divisions.

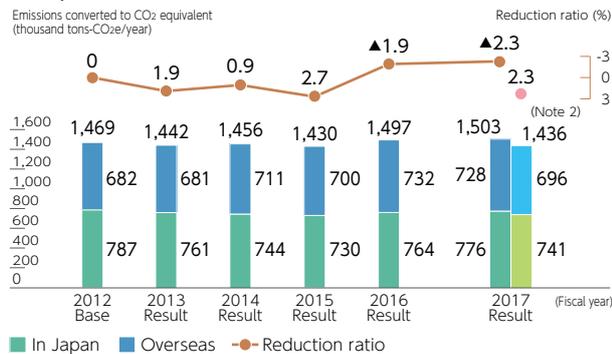
Since fiscal 2012, especially in response to skyrocketing energy costs in Japan, we have enhanced our system for energy saving efforts with the Energy Saving Office serving as the organizer. We have appointed a new task committee member from each division to encourage the divisions to promote energy saving activities in a more organized and voluntary manner. With these efforts, improvement of energy efficiency in our overseas companies is in progress while we are shifting our production facilities to overseas sites.

While GHG emissions had been calculated based on the emission factor of the base year as a fixed value in order to evaluate the results of our energy saving activities without external influences, we decided to apply the latest emission factor for each fiscal year from fiscal 2017 to calculate and disclose emissions in a way that the amount is closer to the actual value.

As a transitional measure, we disclose both of the results in fiscal 2017 calculated based on the same emission factor used until fiscal 2016 and those based on the latest emission factor.

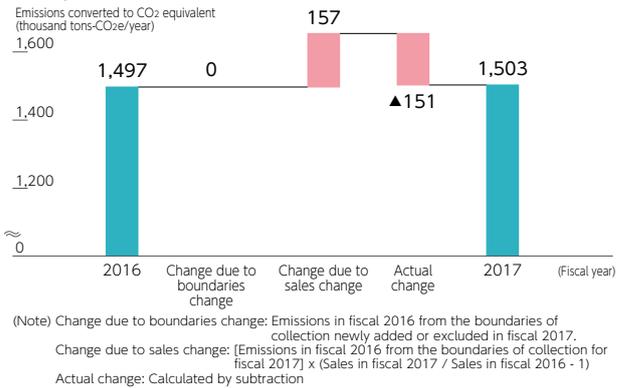
As a result, while the production volume in the Group as a whole increased, our GHG emissions in fiscal 2017 decreased in Japan but grew overseas from the fiscal 2012 level. The emissions in the whole Group decreased by 2.3% from the fiscal 2012 level.

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

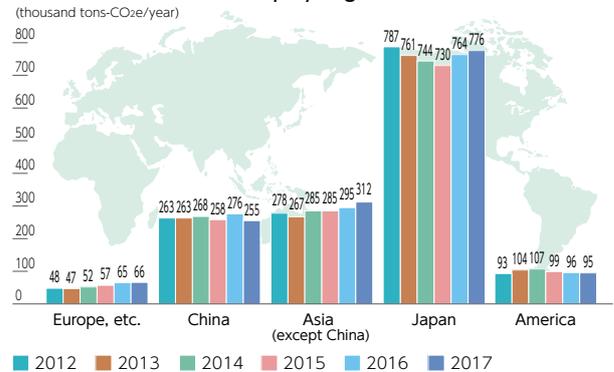


(Note 1) GHG emissions are calculated based on the Greenhouse Gas Emissions Accounting and Reporting Manual Ver. 3.5 (2014) by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry (except the emission factors, which are mentioned below).  
Basic policy on the emission factors: fixed emission factors are applied to the values for all fiscal years presented in the graph.  
CO<sub>2</sub> 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 2016" (2017) by the Japanese Ministry of the Environment  
[Overseas] Emission factor in each country for 2015 mentioned in "CO<sub>2</sub> Emissions from Fuel Combustion Highlights 2013" (2013) by IEA  
CO<sub>2</sub> emission factor for other than purchased electricity  
[Both in Japan and overseas] Emission factor in "Guidelines for accounting and reporting of greenhouse gas emissions from industrial commercial sectors" (2003) by the Japanese Ministry of the Environment  
(Note 2) For the results in fiscal 2017, the values calculated based on the following emission factor are presented together.  
CO<sub>2</sub> 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 2016" (2017) by the Japanese Ministry of the Environment  
[Overseas] Emission factor in each country for 2015 mentioned in "CO<sub>2</sub> Emissions from Fuel Combustion Highlights 2017" (2017) by IEA  
CO<sub>2</sub> emission factor for other than purchased electricity (excluding greenhouse gas emissions from non-energy sources)  
[Both in Japan and overseas] Emission factor in "Guidelines for accounting and reporting of greenhouse gas emissions from industrial commercial sectors" (2003) by the Japanese Ministry of the Environment  
CO<sub>2</sub> conversion factor for greenhouse gas emissions from non-energy sources:  
[Both in Japan and overseas] Global warming potential in "Greenhouse Gas Emissions Accounting and Reporting Manual Ver. 4.3.2" (2018) by the Japanese Ministry of the Environment

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



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

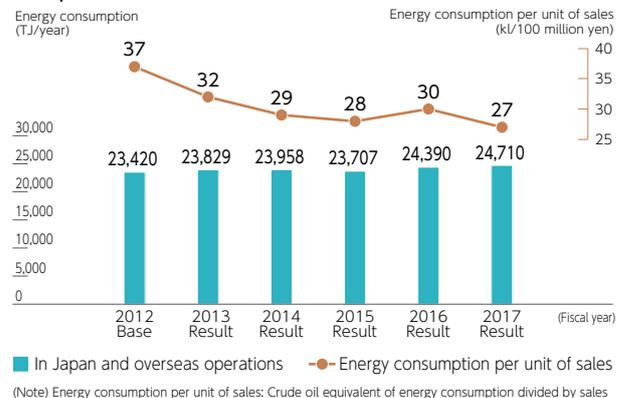


## Reduction of Energy Consumption

Production efficiency has been improved

We reduced energy consumption per unit of sales by 27% from the fiscal 2012 level in fiscal 2017. This significant improvement was attributed to overseas sales growth along with improvement of energy efficiency. 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)



## Emission data for Scope 3

### We provide data to CDP\*

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

### Greenhouse Gas Emissions in FY2017 (thousand tons-CO<sub>2</sub>e/year)

Scope	Emissions (thousand tons-CO <sub>2</sub> e/year)	Checkmark
Scope 1	178	✓
Scope 2	1,326	✓
Scope 3	3,150	

Category	Description	Emissions (thousand tons-CO <sub>2</sub> e/year)	Change in emissions
1	Purchased goods and services	2,255	Increased
2	Capital goods	519	Decreased
3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	213	Decreased
4	Upstream transportation and distribution	37	Increased ✓
5	Waste generated in operations	20	Decreased
6	Business travel	33	Increased
7	Employee commuting	73	Increased

(Note 1) Scope 1: Direct emissions from the use of fossil fuels, etc. in our facilities (including SF<sub>6</sub> and other greenhouse gases)  
 Scope 2: Indirect emissions from the use of electricity and steam supplied from outside our facilities  
 Scope 3: Sum of Categories 1 to 7

(Note 2) The data for Category 4 in the table above cover logistics data in Japan only.

(Note 3) Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain, Ver. 2.2 of the Japanese Ministry of the Environment were referred to for the calculation.

## Energy Saving Activities in Production Units

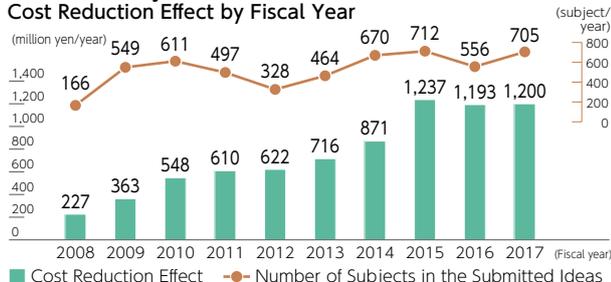
### We are working to reduce wasteful use and improve efficiency with the effects of ideas for energy efficiency improvement

#### 《 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 4% per annum from the fiscal 2012 level in the Action ECO-21 Campaign. Meanwhile, Group companies and divisions set the target of reducing energy consumption per unit of production by 4% per annum from the fiscal 2012 level and strive to meet it through the discovery of subjects for energy saving and promotion of activities in a planned manner. In fiscal 2017, while the target was a reduction of 20% from the fiscal 2012 level, we reduced energy consumption by 20%.

The number of subjects in the submitted ideas and cost reduction effect are presented below.

### Number of Subjects in the Submitted Ideas and Cost Reduction Effect by Fiscal Year



#### 《 Specific Measures 》

To promote energy saving activities of Group companies and divisions, we have taken such measures as energy saving evaluation, measurement-based evaluation, adoption of relevant technologies and development and evaluation of new technologies, and proposed new ideas. From fiscal 2016, in addition to the proposal of ideas, we promote cooperation in priority areas, in which we actually implement improvement

activities in cooperation with divisions, and continuously enhance other initiatives by conducting the PDCA cycle to ensure the improvement of 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 conduct measurement and analysis of power consumption during holidays and at night, as well as the diagnosis in overseas affiliates.

#### ● 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. 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 in 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

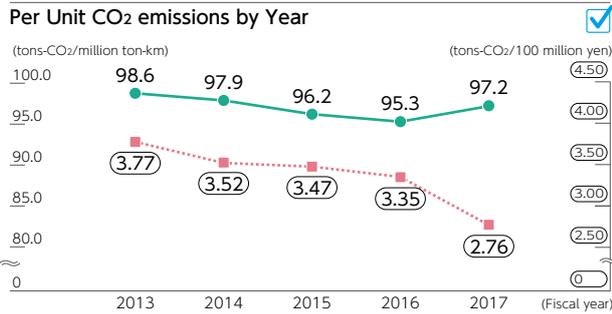
## Reduction of CO<sub>2</sub> Emissions in Logistics

### We reduced CO<sub>2</sub> emissions by offsetting a decrease in railroad and coastal transportation by shortening the transportation distance

In fiscal 2017, per-unit CO<sub>2</sub> emissions from transportation in the Sumitomo Electric Group as a whole in Japan were reduced by approximately 5.8%<sup>(Note 1)</sup> with improvement in Sumitomo Wiring Systems, Ltd. despite the deterioration in Sumitomo Electric due to a decrease in railroad and coastal transportation.

Sumitomo Electric increased CO<sub>2</sub> emissions in logistics by approximately 2.1% from the previous fiscal year due to reasons including a decrease in mass railroad and coastal transportation in the final phase of a large project, as well as a decrease in the shipment of high-strength steel wires from Itami to the destinations in Fukuoka Prefecture, although the emissions were reduced with integrated transportation of the freight to be shipped from Sumitomo Electric Tochigi Co., Ltd. to the destinations in Fukushima and Aichi Prefectures along with the use of trailer trucks for the shipments instead of 15-ton vehicles. Sumitomo Wiring Systems, Ltd., on the other hand, reduced CO<sub>2</sub> emissions in logistics significantly by approximately 17.5% as a result of modal shift from truck transportation to coastal transportation for shipment from Yokkaichi to Kitakyushu, shortening of transportation distance in Japan by changing the port of discharge for imported parts, growth of tripartite trades<sup>(Note 2)</sup> and other factors.<sup>(Note 3)</sup>

We will continue the group-wide efforts to reduce CO2 emissions from transportation.



—●— Sumitomo Electric Group (Sumitomo Electric + 32 manufacturing companies in Japan (excluding Sumitomo Wiring Systems, Ltd.))  
 - - - ■ - - - Sumitomo Wiring Systems, Ltd.

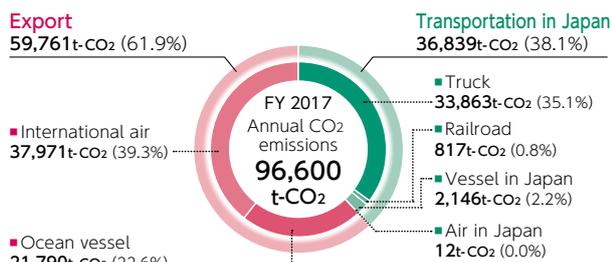
- (Note 1) Per unit CO<sub>2</sub> emissions in the Sumitomo Electric Group compared with the previous fiscal year  
 Sumitomo Wiring Systems, Ltd. adopts CO<sub>2</sub> emissions per sales amount as the basis for the calculation while other Group companies use CO<sub>2</sub> emissions per cargo transport (t-km). Therefore, the weighted average of each year-on-year CO<sub>2</sub> emission reduction rate is calculated based on the CO<sub>2</sub> emissions.
- (Note 2) In a tripartite trade, an operator in a third country intermediates between the supplier country and the destination country. This trade has no impact on CO<sub>2</sub> emissions in the third country because the goods are exported directly from the supplier country to the destination country without going through the third country.
- (Note 3) When the sales amount from tripartite trades is excluded from the total sales amount, per-unit CO<sub>2</sub> emissions from Sumitomo Wiring Systems, Ltd. in fiscal 2017 are 3.31, a year-on-year reduction of 1.2%.

## CO2 Emissions from Transportation

In light of the globalization of our business activities, we strive to calculate data on CO<sub>2</sub> emissions concerning transportation from Japan to the ports or airports in the destination countries for delivery of products to overseas destinations, the supply of raw materials and parts to overseas affiliates and other export activities.

At present, CO<sub>2</sub> emissions from our export activities were approximately 1.6 times higher than those from our transportation activities in Japan and accounted for roughly 62% of the total CO<sub>2</sub> emissions from our transportation activities. About 78% of the emissions from export activities were attributed to international air delivery.

### CO2 Emissions from Transportation in the Sumitomo Electric Group in FY 2017



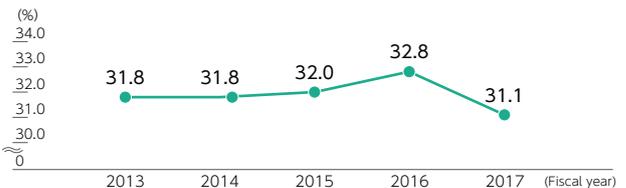
(Note) Boundaries of data collection: Sumitomo Electric + 32 manufacturing companies in Japan + Sumitomo Wiring Systems, Ltd.  
 CO<sub>2</sub> emissions in Japan are calculated on an improved ton-kilometer basis and a fuel-efficiency basis. CO<sub>2</sub> emissions from export activities are calculated using the conventional ton-kilometer method. Based on the simple calculation tool for logistics CO<sub>2</sub> emissions by Policy Research Institute for Land, Infrastructure, Transport and Tourism (PRILIT)

## Promotion of Modal Shift

Sumitomo Electric is active in promoting modal shift mainly in the case of heavy and long-distance (500 km or longer) freight transportation.

In fiscal 2017, the modal shift rate deteriorated due to decreases in railroad transportation to Miyagi Prefecture and coastal transportation to Oita Prefecture from Osaka Works, in addition to the reasons mentioned above.

### Modal Shift Rate\* of the Sumitomo Electric Group by Year



(Note) Boundaries of data collection: Sumitomo Electric + 32 manufacturing companies in Japan (excluding Sumitomo Wiring Systems, Ltd.)

$$\text{Modal shift rate (\%)} = \frac{\text{Cargo transport by rail or ship (ton-km)}}{\text{Total amount of cargo transport in Japan (ton-km)}} \times 100$$

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



## Introduction of a 21-meter Full Trailer Truck

Sumitomo Wiring Systems, Ltd., an affiliate of Sumitomo Electric, introduced a 21-meter full trailer truck for long-distance transportation from the Suzuka and Yokkaichi area in Mie Prefecture to Sayama City, Saitama Prefecture in November 2017.

Conventionally, two 10-ton vehicles were used to deliver the products collected at the five plants in the Yokkaichi and Suzuka area to Sayama Storing & Shipping Center twice a day. Now, the products are collected with different trucks and then moved to a full trailer truck, which transports the freight that used to be carried with two 10-ton vehicles. With this improvement, the number of drivers required for the operation was reduced from four to two, which helped address the shortage of truck drivers, and CO<sub>2</sub> emissions and operation cost were reduced by approximately 23% and 5%, respectively. The introduction of full trailer trucks is also being planned for transportation between Mie Prefecture and Miyagi Prefecture and between Saitama Prefecture and Iwate Prefecture.



Newly introduced 21-meter full trailer truck

### 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 CO<sub>2</sub> 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

## Efforts to Achieve Zero Emissions and Reduce the Amount of Waste (in Japan)

We aim to manage waste in a proper manner

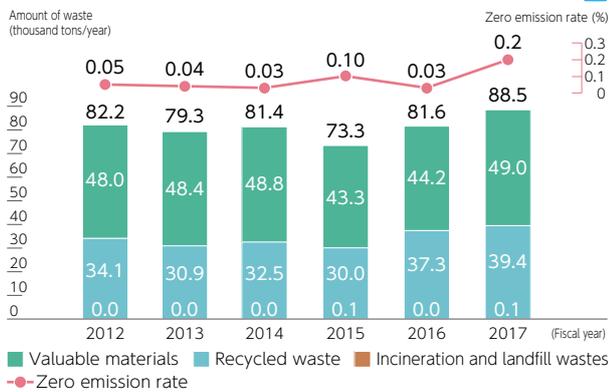
### 《Promotion of Zero Emissions》

To help solve social problems such as shortage of landfill sites and illegal waste dumping and to make effective use of resources, it is necessary to avoid landfilling of industrial waste without serious efforts and recycle waste to the extent possible. The Sumitomo Electric Group sets the zero emission rate as the indicator for the efforts and works to meet the target of reducing the rate to 0.3% or less.

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

(Note) From the Action ECO-21 (Phase V) 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)



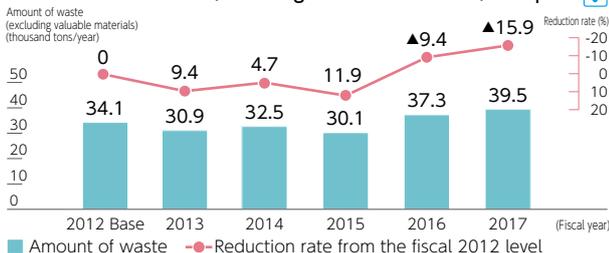
(Note) The boundary of data collection for valuable materials has been reviewed and part of the waste metal generated outside of the facilities of the Sumitomo Electric Group that used to be included in the boundary is not included from this fiscal year. This change has been retroactively applied to the data for fiscal 2015 and fiscal 2016 to correct the respective amounts of valuable materials for the two fiscal years. The amounts of valuable materials without this change would be as follows: FY2015: 47.0 thousand tons; FY2016: 48.0 thousand tons; FY2017: 52.7 thousand tons

### 《Reduction of the Amount of Waste》

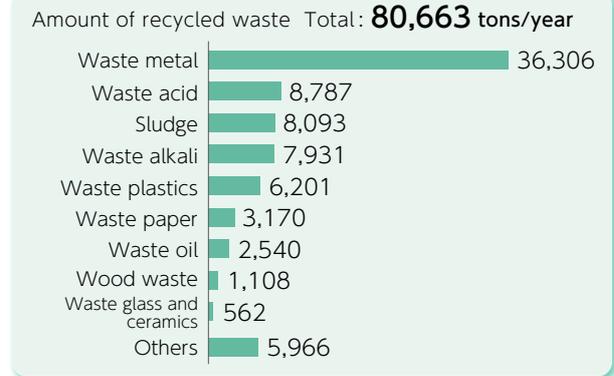
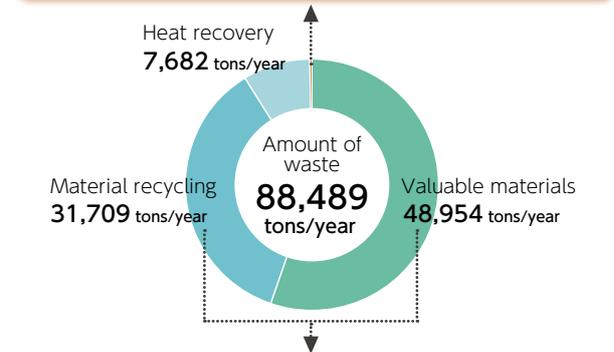
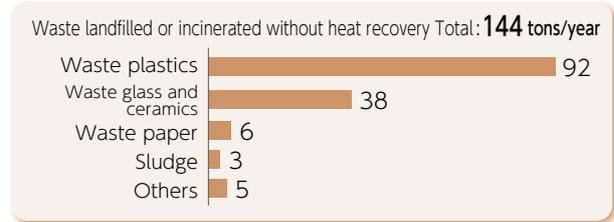
The Sumitomo Electric Group is also committed to reducing the amount of industrial waste generated in its facilities by improving production efficiency.

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 reuse of the waste generated by the company and reduction of waste volume. In fiscal 2017, we failed to achieve the target with an increase in the amount of the waste disposed of by outside contractors due to troubles in the waste liquid treatment equipment. We will continue to make efforts with focus on the reduction of unneeded materials generated through waste liquid treatment.

### Waste Reduction Rate (Excluding Valuable Materials) in Japan



### Amount of Waste by Type in FY 2017 (in Japan)



## Reduction of the Waste to Be Incinerated Without Heat Recovery or Landfilled (Overseas)

### Waste management outside of Japan

While the situation of landfill sites overseas is different from that in Japan, we work to refrain from landfilling industrial waste without serious efforts and recycle waste to the extent possible through separation of waste and other efforts to maintain proper waste management.

Partly due to the fact that we also operate in countries where the environment for recycling has not been developed, we failed to meet the target with a zero emission rate of 9.1% in fiscal 2017, which slightly exceeded the target.

### Amount of Waste and Zero Emission Rate (Overseas)



# 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.

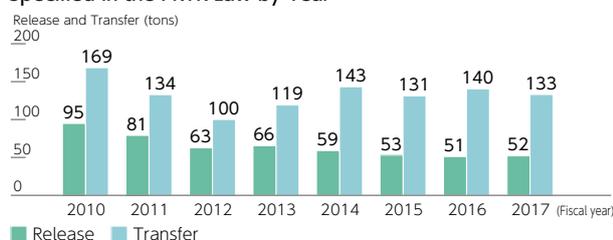
We will continue our efforts to enhance the management of chemical substances used in the Group.

## 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 42 sites of Sumitomo Electric's Osaka and Yokohama Works and 25 Group companies submitted such reports for fiscal 2017. Sumitomo Electric Group's total release and transfer of PRTR-designated substances in Japan were 52 tons and 133 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	
Toluene	18.0	0.0	0.0	0.0	18.0	0.0	6.8	6.8	24.8
Lead	0.0	0.0	0.0	0.0	0.0	0.0	23.0	23.0	23.0
1,2-dichlorobenzene	4.8	0.0	0.0	0.0	4.8	0.0	16.0	16.0	20.8
Phenol	5.1	0.0	0.0	0.0	5.1	0.0	15.2	15.2	20.3
Cresol	3.2	0.0	0.0	0.0	3.2	0.0	10.0	10.0	13.2
Formaldehyde	0.0	0.0	0.0	0.0	0.0	0.0	9.3	9.3	9.3
ethanolamine	0.0	0.0	0.0	0.0	0.0	0.6	8.5	9.1	9.1
1-bromopropane	7.6	0.0	0.0	0.0	7.6	0.0	0.6	0.6	8.2
Copper salts(water-soluble, except complex salts)	0.0	0.1	0.0	0.0	0.1	0.1	6.1	6.2	6.3
Xylene	1.4	0.0	0.0	0.0	1.4	0.0	4.8	4.8	6.2
37 other substances	9.9	1.6	0.0	0.0	11.5	0.1	32.1	32.2	43.7
<b>Total</b>	<b>50.0</b>	<b>1.7</b>	<b>0.0</b>	<b>0.0</b>	<b>51.7</b>	<b>0.8</b>	<b>132.4</b>	<b>133.2</b>	<b>184.9</b>

(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	2	0	0	0	2	0	2	2	4

(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 were committed to reducing the release of chemical substances specified in the PRTR Law as an initiative of the Action ECO-21 (Phase VI) Campaign from fiscal 2015 to fiscal 2017. In fiscal 2017, we made efforts to meet the target of reducing the release by 5% from the fiscal 2012 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 17.4% from the fiscal 2012 level to 51.7 tons in fiscal 2017, which met the above-mentioned target.

From fiscal 2018, we will continuously strive to reduce the release of chemical substances specified in the PRTR Law as an initiative of the new Action ECO-22V Campaign.

## 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 companies. Institutional investors and clients require companies to respond to the problems to sustain their 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.

## Establishment of an Organization to Promote the Measures

### We have started to evaluate water risks on a global scale

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 based on 12 indicators in total, including water quantity, water quality, regulations 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.

According to the answers from those 32 bases in the survey, they were actually facing risks in an average of about 20% of the items specified by Aqueduct as high risk. We also identified cases that directly affected their operation such as inundation into the plant site due to concentrated heavy rain, temporary suspension of water supply due to water repair work or power failure and abnormal water quality in an upstream area.

## Development of the Activities on a Company-wide Scale

### We surveyed risks in our bases in Japan and overseas

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 our Group based on the CDP 2018 water management indicators. The questionnaire was then distributed to the 87 production bases in Japan and overseas selected as the targets for the promotion of environmental activities and their answers were collected in March and April 2018.

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 2018 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

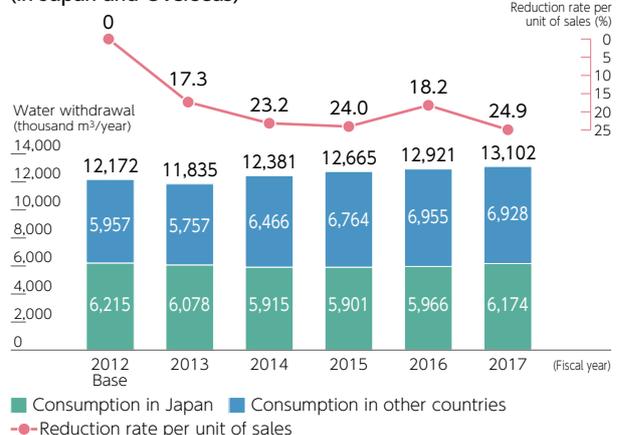
### We monitor the total amount of water withdrawal

The Sumitomo Electric Group added the reduction of water consumption to its action items for the Action ECO-21 Campaign in fiscal 2008 and has actively worked for it since then. Our water consumption slightly increased year-on-year in fiscal 2017 partly due to the growth of production in domestic bases where a large volume of water is used. In terms of water withdrawal by source, we take 86% of water from municipal water and 14% from groundwater.

In the meantime, the destinations of the effluent are sewer systems (63%) and rivers (31%) while 6% is discharged into unknown destinations.

In the course of the reduction activities, we found water leakage in our facilities, which motivated us to promote efforts to address and manage water leakage in a steady manner. We are 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) 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 2017, a total of 923 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.

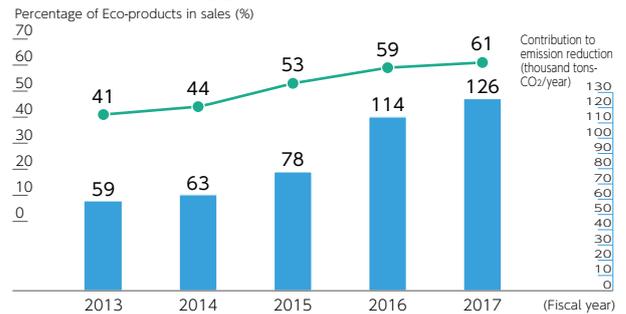
By the end of fiscal 2017, a total of 275 items have been registered as Eco-products. The sales ratio in fiscal 2017 was 61%.

#### 《Anti-Global Warming Products》

In this system, we register the Eco products that especially contribute to the reduction of CO<sub>2</sub> emissions in the production stage or when they are used by customers, and calculate the reduction effect.

The products contributed to the reduction of CO<sub>2</sub> emissions by a total of 126 thousand tons in fiscal 2017.

### Percentage of Eco-Products in Sales and Contribution to the Reduction of CO<sub>2</sub> Emissions

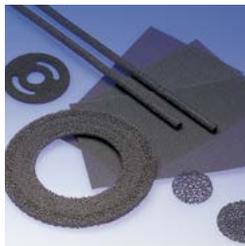


Calculation method

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.)

For methods to calculate the contribution to the reduction of CO<sub>2</sub> emissions, see “Examples of Eco-Products” below.

## Examples of Eco-Products



**Contributing to the improvement of fuel efficiency of hybrid cars as electrodes of secondary batteries**

**CELMET™ (porous metal)**  
Sumitomo Electric Toyama Co., Ltd.

The contribution is calculated by estimating CO<sub>2</sub> emissions reduced with a hybrid car in accordance with the criteria set by Sumitomo Electric.



**Contributing to energy saving in base stations with compound semiconductor power amplifying elements**

**GaN HEMT**  
Sumitomo Electric Device Innovations, Inc.

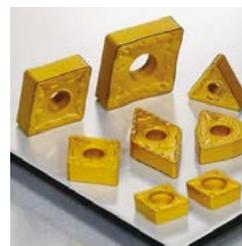
The contribution is calculated by estimating the reduction of CO<sub>2</sub> emissions achieved at a base station in accordance with the criteria set by Sumitomo Electric.



**Contributing to the improvement of fuel efficiency of cars by trimming the weight**

**Lightweight wire harness**  
Sumitomo Wiring Systems, Ltd.

The contribution is calculated by estimating the amount of CO<sub>2</sub> emissions reduced by improvement of fuel efficiency of a car achieved by reducing the weight in accordance with the criteria set by Sumitomo Electric.



**Contributing to resource saving by extending the service life**

**Cemented carbide tools with longer service life**  
Sumitomo Electric Hardmetal Corp.

The contribution is calculated by estimating the amount of the resources saved and CO<sub>2</sub> emissions reduced from the production in accordance with the criteria set by Sumitomo Electric.



**Contributing to the improvement of productivity of processed materials and fuel efficiency of automobiles**

**Sintered products**  
Sumitomo Electric Sintered Alloy, Ltd.

The contribution is calculated by estimating the amount of CO<sub>2</sub> emissions reduced in the production of the processed materials and in the use of oil pumps in accordance with the criteria set by Sumitomo Electric.

## Promotion of CSR Activities in Affiliates

### Sumitomo Rubber Industries, Ltd.

 <http://www.srigroup.co.jp/english/csr/>



Dunlop Nationwide Tire Safety Checks Conducted as Part of "Integrity" Initiatives

Sumitomo Rubber Industries created the Sumitomo Rubber Group's Basic CSR Philosophy in 2008 in the belief that it is necessary to establish a clear code of conduct for the Group's overall CSR activities while further accelerating the shift to a management style that actively pursues greater social value.

This Basic Philosophy is composed of a CSR Philosophy and CSR Guidelines. Our CSR Philosophy proclaims that, through our CSR activities, the Sumitomo Rubber Group will aim to become a corporate group that earns the trust of society such that our continued existence is always viewed as a positive thing. Meanwhile, our CSR Guidelines specify how we should act based on this philosophy.

There are five core components to our CSR Guidelines: Green (as in green initiatives), Ecology (as in reducing the environmental impact of our business activities), Next (as in next-generation product development), Kindness (as in kindness to employees and others) and Integrity (as in integrity for all stakeholders). Put together, these components spell out the word "GENKI" (Japanese for "energetic") in reference to the Group's GENKI Activities, which is a separate initiative that we launched in 1988 with the aim of energizing employees.

Based on the basic philosophy and guidelines behind our CSR activities, the Sumitomo Rubber Group is working to create new value throughout our business activities by developing and implementing new and unique CSR activities with the aim of further enhancing our social value and, by extension, our economic value.

### Sumitomo Wiring Systems, Ltd.

 <https://www.sws.co.jp/en/csr/index.html>



The 100th Anniversary Celebration Concert of Sumitomo Wiring Systems, Ltd.

Sumitomo Wiring Systems celebrated the 100th anniversary of its founding in December 2017. In commemoration of it, we held various events to express our gratitude to the local community. One of them was a concert by a violinist from Yokkaichi City with a symphony orchestra organized in July. We invited 1,700 residents in the region for free to express our gratitude to the local community as well as to contribute to the promotion of local arts and culture. We received positive comments from many visitors.

Mie Prefecture, in which we are based, successfully invited an

international competition of boccia, a sport designed for persons with disabilities, for the first time in Japan and we supported the competition held in March 2018 as an official sponsor.

Other CSR activities included the continuance of free loan of welfare vehicles to a specified nonprofit organization in the neighborhood, encouragement of employees to participate in sports events for persons with disabilities and participation in the operation of such events as volunteers. We will continue to give active support for the promotion of the understanding of persons with disabilities and for their independence and social participation.

As our initiatives for regional revitalization through the promotion of sports, we gave support to PEARLS, a local women's rugby team, including the assistance of the players in their employment, and have recruited one athlete of sport climbing, which is an official event at the 2020 Tokyo Olympic Games. We will make social contributions through sport-related initiatives including support of athletes and promotion of sports as mentioned above.

Toward the next 100 years, Sumitomo Wiring Systems will continue to contribute to society through the delivery of safe, convenient and environment-friendly cars to as many customers as possible and actively promote social contribution activities to become a company rooted in the region and loved by local people.

## Sumitomo Riko Company Limited

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



Emergency Medical Care Experience Fair organized in APiTA Komaki Store

The Sumitomo Riko Group considers that social contribution activities generate social values and also help improve corporate values. With our slogan "Along with You, Together with Society," which symbolizes the social contribution of our Group, we are actively conducting social contribution activities to become a company that moves forward in harmony with society. We aim to make value-creating social contributions, which

are positioned as activities that help meet society's challenges. In line with social demand, we have specified five priority areas for the activities, namely diversity, the sound development of young people, building community, civil activities and the promotion of coexistence with the natural environment, and implement various activities in those fields.

As an initiative for contribution to "building community," we organized the "Sumitomo Riko Emergency Medical Care Experience Fair in APiTA Komaki Store" in a shopping mall for the public last year. Our product "Shinnosuke-kun," a training and evaluation system for chest compression, was used in this event to make the need and effect of basic life support known to people, including those who are not interested in it, and provide them with an opportunity to experience critical care in order to thereby save as many lives as possible. We held this unique event directly related to our business in collaboration with wide-ranging members of the local community such as other companies, public bodies and citizen groups.

We will continue our social contribution activities to be a company that is appreciated by the local community.

## Nissin Electric Co., Ltd.

 <http://nissin.jp/csr/index.html>



On-site science classes for elementary school students to learn with joy

Principles of Activities of the Nissin Electric Group are "Integrity, Trust and Long-term Relationships." Through the corporate activities that solidify the trusts with stakeholders and support social and industrial foundations, we are aiming to help create a vibrant society in harmony with the environment. Our group is making concerted efforts to promote various social contribution activities with focus on the

three areas of "Support of the development of engineers," "Preservation of historical and cultural assets mainly in Kyoto" and "Cooperation with local environmental conservation activities."

We are especially committed to the development of human resources who will lead the next generation with an idea that engineers who create innovations are essential for the continuous growth of the Japanese industry.

One of the initiatives is an on-site science class, which aims to help more elementary school students develop an interest in science. In the classes, students generate, store and use electricity by themselves using a "hands-on eco-power generation system," a new learning material developed and created jointly by our group companies. This system includes experiences generating electricity with solar panels and by pedaling, and riding in a solar car. We provide the students with an opportunity to think of the effective use of renewable energy through the classes.

In addition, to support the research activities of talented students who are ambitious to learn advanced technologies, the Nissin Electric Group Foundation for Social Contribution provides scholarships for technical graduate students studying to be an engineer/researcher.

Through these initiatives, we will contribute to the development of human resources that support the industry of the future.



## Independent Assurance Report

To the President and 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 (the “Indicators”) marked with “” for the period from April 1, 2017 to March 31, 2018, with the exception of the “Employment Rate of the Physically or Mentally Disabled” which is as of June 15, 2018, included in its CSR Report 2018 (the “Report”) for the fiscal year ended March 31, 2018.

### 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’, the ‘ISAE 3410, Assurance Engagements on Greenhouse Gas Statements’ issued by the International Auditing and Assurance Standards Board, and the ‘Practical Guidelines for the Assurance of Sustainability Information’ of the Japanese Association of Assurance Organizations for Sustainability Information. 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.
- Visiting two of the Company’s subsidiaries selected on the basis of a risk analysis.
- 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.*

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Osaka, Japan

November 9, 2018

## Comments from an External Expert

My findings from CSR Report 2018 (hereinafter "this Report") on Sumitomo Electric Group's activities and efforts to fulfill their social responsibility, and disclose relevant information, are as follows:

### Changes of the times and what is expected of the Sumitomo Electric Group

The opening of Top Message in this Report mentions that consolidated net sales, operating income and profit attributable to owners of the parent were all record highs in fiscal 2017. After seeing results, I am convinced that the business activities of the Sumitomo Electric Group are responding accurately to the needs of the times.

In addition, when the future outlook is considered, the efforts of the industrial world to ensure sustainability of the global environment and society such as promotion of activities to meet demand for CASE (Connected, Autonomous, Shared, Electric) and growth of environment-friendly vehicles in the automobile industry, as well as implementation of large international interconnector projects and progress in the use of renewable energy in the power industry, will also provide new business opportunities for the Sumitomo Electric Group. I expect that the Group serves as a leader in responding to such changes of the times.

Meanwhile, it was difficult from this Report to understand "the vision of the society that the company aims to achieve" or "the will of the company to lead the changes" probably because it is a nature of a B-to-B company. I hope that the next report will show a stance to "build a sustainable future through business activities" more clearly.

### Aspects needing improvement

#### ■ Information for evaluating the effectiveness of internal control

In recent years, quality data falsification and other scandals have occurred frequently in Japanese companies. Conventional initiatives like campaigns to reduce defects would not prevent such cases effectively. The key to preventing such cases is internal control systems in place to detect, correct and prevent willful acts attempting to cover up or alter information. While it is not easy to present the effectiveness of internal control to external stakeholders, I paid attention to the article on the Speak-Up System in this Report as the number of consultations has continued to increase in recent years. I suggest that the Sumitomo Electric Group consider the disclosure of the background factors, the contents of the consultations and the records of the issues that have been solved.

#### ■ Disclosure of the contents and results of activities in overseas business bases

Sumitomo Electric has 280 overseas affiliates with an overseas employee ratio of 84.5% and an overseas sales ratio of 59.7% as of fiscal 2017. Since the total number of employees is also as

large as more than 210,000, data on overseas business bases are essential to understanding the entire picture of the Sumitomo Electric Group. The situation in the overseas bases was not easy to understand in some sections of this Report including the articles on occupational accidents, quality-related activities, working hours and health and productivity management. I suggest that the Sumitomo Electric Group consider expanding and improving the disclosure of the activities of overseas business bases and their results.

#### ■ Concept of backcasting and setting of targets

This Report explains that the target of reducing greenhouse gas emissions by 5% from the fiscal 2012 level on a global scale was not met and the reduction stayed 2.3% because the sales increased by about 20% over the five years. In recent years, on the other hand, the concept of setting targets from the perspective of environmental restrictions has emerged in the world, as exemplified by the diffusion of new ways of addressing climate change such as the introduction of two-degree goal and carbon budget, as well as the incorporation of "Zero Challenge" (aiming to have practically no environmental impact) or "RE100" (meeting all energy demand with renewable energy) into targets in some Japanese companies. I suggest that the Sumitomo Electric Group also consider a way to reestablish the business portfolio that consists with a decarbonized society from a long-term viewpoint.

#### ■ Response to new challenges

As a recent problem, marine pollution by microplastics has been rapidly attracting attention. Products of the Sumitomo Electric Group such as wiring harnesses and fluororesin products can also be related to the problem. In developing countries, improper disposal of wiring harnesses in discarded cars, such as open incineration, is causing health damage. It is also indicated that the sites for mining cobalt and other rare metals still involve harsh working conditions and child labor. I suggest that the Sumitomo Electric Group consider initiatives to proactively address emerging problems in scope of the entire value chain.



**Eiichiro Adachi**  
Counselor,  
The Japan Research Institute

### Sumitomo Electric's Response to the Findings



**Yoshitomo Kasui**  
Senior Managing Director  
and Chairperson of  
the CSR Committee

We thank Mr. Eiichiro Adachi for providing suggestive opinions on our Group's activities to fulfill our social responsibility and information disclosure. We are humbled by his great expectations on us, such as an expectation that we play a leading role in meeting the changes of the times.

In the Sumitomo Spirit, which has been inherited as the basic value standards for the Sumitomo Electric Group since its foundation, one of the traditional beliefs and principles is "long-range planning." This indicates that business development with a future-looking and long-term view, complemented by a wider perspective to secure national and social interests, is one of the factors that have made Sumitomo distinctive. While a basic concept in our new mid-term management plan VISION 2022 is "Contributing to a better society by leveraging our expertise in connectivity and transmission technologies through concerted efforts of the entire group" to become a Glorious Excellent Company, which is our ideal state, the comments from Mr. Adachi made us confirm that we are in the right direction.

Mr. Adachi's indications include great issues that should be addressed in an independent business with time and care. Still, we will consider each of the challenges and further enhance our activities to contribute to a better society and environment based on the basic value standards. While also helping achieve the Sustainable Development Goals, we will continue to further develop our CSR activities so that our stakeholders enhance their understanding of our activities and attach a higher value to them.

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.

Administration Division (CSR Promotion Office)

1-3-13, Motoakasaka, Minato-ku, Tokyo, 107-8468 JAPAN Phone: +81-3-6406-2611 Fax: +81-3-6406-2700

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