

Murata value report 2018

The Murata Philosophy

Murata Philosophy was created by founder Akira Murata in 1954.

Since then, the world around us has dramatically changed, and technologies have continued to evolve.

However, the thoughts embodied in our philosophy will always remain the same.

All employees share these thoughts and exercise them in their daily work.

Murata Philosophy

We contribute to the advancement of society

by

enhancing technologies and skills

applying scientific approach

creating innovative products and solutions

being trustworthy

and, together with all our stakeholders, thankful for the increase in prosperity.

Editorial policy

Murata Manufacturing Co., Ltd. published its Environmental Report in 2002, and has been disseminating the Company's information since 2010 in the Murata Report, a brochure that combines its Company guide, CSR Report and Annual Report (Financial Data).

With stakeholder dialogue being an important consideration, Murata decided to publish an "Integrated Report" beginning this year in order to better convey Murata's activities to improve corporate value over the medium to long term. In addition to the growth strategies to realize the future envisioned by Murata, CSR activities that the Company has been continuously implementing are described as resource strategies in this report.

We created and edited this report by summarizing the main points with the aim of communicating Murata's activities in a concise manner. Detailed financial data and information on CSR activities that cannot be included in this report, as well as environmental data by each business site, are posted on the Murata website. Please refer to the tool map below to obtain required information.

Term of this report

Between April 1, 2017 and March 31, 2018

* Some activities taking place in or before March 2017 or in or after April 2018 are covered in the report as well.

Organizations reported on

Murata Manufacturing Group

(Murata Manufacturing Co., Ltd. and 99 subsidiaries inside and outside of Japan)

Reference guidelines

ISO26000

The International Integrated Reporting Council (IIRC)

"The International Integrated Reporting Framework"

Ministry of Economy, Trade and Industry

"Guidance for Collaborative Value Creation"

CSR-related policy list

CSR Charter/Corporate Ethics Policy and Code of Conduct/Human Rights and Labor Policies/EHS Disaster Prevention Policy/Purchasing Policies/Quality Policy/Disclosure Policy/Basic Policies for Activities to Contribute to Society and Local Communities/Basic Policy for Prevention of Cartels and Bribery

Future forecasts, plans and targets

In addition to past and current performance, this report contains future forecasts, predictions, plans, and other information. Such forecasts, predictions, and plans are assumptions or judgments based on information available at the time of publication, and hence include uncertainties. Accordingly, the results of future operating activities and future phenomena may differ from forecasts, predictions, and plans in this report.

Contents

| 03 Murata's business model | History of value provision | 03 | | | | |
|----------------------------|---|----|--|--|--|--|
| Dusiness model | Process of value creation | | | | | |
| | Murata's core competencies | 07 | | | | |
| | Consolidated financial and non-financial highlights | 11 | | | | |
| 4 Crowth | Message from the President | 13 | | | | |
| 13 Growth strategies | riessage from the rresident | 10 | | | | |
| T Strategies | Mid-term Business Plan | 17 | | | | |
| | Strategy by product | 19 | | | | |
| | | | | | | |
| 25 Management strategies | Corporate governance | 25 | | | | |

Executives

Risk management 33 Compliance 34 Technologies 35 Human resources 37

Message from Outside Directors 31

29

| 43 | Environmental strategies | Environmental preservation | 43 |
|----|--------------------------|----------------------------|----|
| | | | |

Partnerships

| 45 Third party evaluation | Opinion from a third party | 45 |
|---------------------------|----------------------------|----|
| | | |

| 46 Financial information | Analysis of operating results and financial situation | 4 |
|--------------------------|---|---|
|--------------------------|---|---|

51 Company data 51

Tool map

Murata disseminates a variety of information using various tools to communicate with its stakeholders. In addition to the information contained in this report, a variety of information on Murata's products and environmental activities can be found on our website. We will continue to proactively disclose information to allow our stakeholders to better understand Murata.



Summary Corporate website

Top page
https://www.murata.com/en-global

Financial information
https://www.murata.com/en-global/ir

Non-financial information
https://www.murata.com/en-global/about/csr

^{*} In this report, "Murata" refers to the Murata Manufacturing Group as a whole, and "Murata Manufacturing Co., Ltd." to Murata Manufacturing as a standalone company.



History of value provision

The evolution of electronics has been enriching people's lives and realizing various dreams. One of the driving forces of that history is Murata's electronic components. What was necessary for that era? What symbolized dreams for the next era? It can be said that electronic components represent the times, and such items also quietly begin to tell of the future.

Establishment - Response to the rapid increase of demand for electronic components

(1944 - 1954)

Founder Akira Murata started Murata Manufacturing as a personal venture at an old dyeing factory in Shijo Omiya Kita, Kyoto-shi, in 1944. The venture produced titanium-oxide ceramic capacitors in the period after the Second World War. The venture was reorganized into Murata Manufacturing Co., Ltd. in 1950, when the demand for electronic components rapidly increased due to the spread of communication equipment after the start of commercial radio broadcasting.

However, Akira Murata felt strongly that the Company needed a management philosophy to grow and develop when it experienced a management crisis during the great recession. As such, he established the first philosophy in 1954 to rebuild the Company.





Temperature compensating capacitor

In 1944, Murata Manufacturing was founded in Nakagyo-ku, Kyoto-shi. Original headquarters building.

| 1944 | Murata Manufacturing founded |
|------|--|
| 1945 | Successful mass production of ceramic elements |
| 1946 | Akira Murata meets Tetsuro Tanaka, then an assistant professor at Kyoto University |
| 1949 | Japan's first mass production of barium titanate ceramic capacitors |
| 1950 | Murata Manufacturing Co., Ltd. established |
| 1951 | Opened Fukui Factory |
| 1952 | Opened Tokyo Office and Kyoto Factory |
| 1953 | Announcement of first management policies |
| | |

1954 Establishment of the first philosophy

Enhancement of technological capabilities Aggressive investments in R&D

(1955 - 1969)

In response to the wave of technological innovation around the world, Akira Murata judged that the Company needed to strengthen its fundamental technological capabilities. In 1955, he spun off the internal research and development department and established Omiya Technology Research Laboratory Co. The company was renamed as Murata Technology Research Laboratory Co. and moved to Nagaoka-cho, Otokuni-gun the following year. It was equipped with state-of-the-art equipment unimaginable for companies of that size at that time. Challenges at Murata Technology Research Laboratory Co. led to the formulation of a management philosophy that research and development required making drastic investments and became the basis for Murata's approach to research and development from that point onward. In the late 1960s, the development of multilayer ceramic capacitors that became the driving force of Murata began. The in-house development, constant rationalization and improvement of all ceramic materials, electrode materials, and manufacturing equipment have led to today's growth of multilayer ceramic capacitors.



In 1962, Their Majesties the Emperor and Empress Showa visited Fukuli Murata Manufacturing Co., Ltd. The country's best flower clock made at that time still resides at Fukui Murata Manufacturing Co. Ltd.

| 1955 | Established Omiya Technology Research Laboratory Co. |
|------|---|
| | Established Fukui Murata Manufacturing Co., Ltd. |
| 1956 | Moved Murata Technology Research Laboratory Co. to Nagaoka-cho |
| 1961 | Moved Head Office to Nagaoka-cho |
| 1962 | The Emperor and Empress visited Fukui Murata Manufacturing Co., Ltd. |
| 1963 | Listed on Second Sections of Osaka Securities Exchange and Kyoto Stock Exchange |
| 1965 | Established the first marketing company in the U.S. |
| 1969 | Listed on Second Section of Tokyo |

Listing on the First Section Beginning of overseas local production (1970 - 1989)

Murata Manufacturing Co., Ltd. was listed on the First Sections of both the Tokyo Stock Exchange and Osaka Securities Exchange in 1970, when the electronics era began in earnest. Furthermore, Murata Electronics Singapore (Pte.) Ltd. was set up in Singapore in 1972 to build a supply system for the ASEAN market, where demand for electronic components was expanding. Murata subsequently began local production of ceramic capacitors. This was Murata's first overseas local production company and the first step toward becoming a multinational company. In order to respond to the diversification of needs in the domestic market, we also continued to expand by setting up new factories and R&D bases, which later became a major force to drive the growth of Mura-





To fortify Murata's R&D capabilities, the Yasu Plant waset up in Yasu-cho, Yasu-gun, Shiga Prefecture (no Yasu-shi) in 1987, and the Yokohama R&D Center i Midori-ku, Yokohama-shi, Kanagawa Prefecture in 1988

| 1970 | Listed on First Sections of Tokyo Stock Exchange and Osaka Securities Exchange |
|------|--|
| 1971 | The Emperor and Empress visited Iwami Electronics industry Co., Ltd. |
| 1972 | Set up the first overseas production and marketing company in Singapore |
| 1976 | Listed on Stock Exchange of Singapore |
| 1979 | Revised the philosophy at the 35th anniversary of foundation |
| 1980 | Acquisition of Erie Technological Products Inc. |
| 1982 | Equity and management participation in Denki Onkyo Co., Ltd. |
| 1987 | Opened the Yasu Plant |
| 1988 | Opened the Yokohama R&D Center |
| | Set up a production company in Thailand |
| 1989 | Merged with Denki Onkyo Co., Ltd. |

Formation of a new management structure

(1990 - 1999)

Akira Murata, who served as the Company's President for nearly 50 years since its foundation in 1944 and grew Murata into an international electronic component manufacturer, renewed the management structure to rejuvenate top management when he turned 70 in March 1991. Yasutaka Murata succeeded as President and began to strengthen corporate governance by shifting from previous organizational management based on the management skills and leadership of the founding President, to enhancing management structure and management efficiency.

In 1994, which marked the 50th anniversary of foundation, we introduced the slogan "Innovator in Electronics." This embodies our desire to be an innovator in the electronics field and expresses a pioneering spirit and enthusiasm for constantly exploring new frontiers.



First MURATA BOY

| 1991 | Yasutaka Murata appointed as President |
|------|--|
| | Development of first MURATA BOY |
| 1992 | Opened a representative office in Beijing, China |
| 1993 | Set up a production company in Malaysia |
| 1994 | Set up a production company in |

Launch of corporate culture reform Relocation of Head Office to a new building

(2000 - 2009)

Murata began corporate culture reform in 2004 with the idea that it needed to instill customer-oriented and workplace-oriented management cultures more than ever to meet the challenge of further growth. This initiative involved reviewing various aspects such as contribution to society, improvement of customer satisfaction (CS), employee motivation and growth (ES), business strategies based on Murata Philosophy, and building a structure for the next growth strategy. In the same year, the Head Office was relocated to the east side of JR Nagaokakyo Station, and core functions such as the Head Office functions and planning functions of business divisions were consolidated. In addition. President Yasutaka Murata assumed office as Chairman of the Board, and Tsuneo Murata succeeded as President in 2007.

Achievement of net sales of one trillion yen Goal for sustainable growth

(2010 - present)

With support from our customers and various stakeholders, Murata achieved net sales of one trillion yen in 2015, a major historic milestone since its founding. We treat this as a passing point and will continue to enhance business foundations such as manufacturing, product development, and human resources development, and expand our businesses not only in core markets but also in focus markets. Furthermore, we will actively pursue acquisitions and alliances, combine technologies and expertise accumulated at Murata with new technologies and ideas, and continue to contribute to the further development of an electronic



Office to a new building



MURATA BOY MURATA GIRL

| 2004 | Launch of corporate culture reform Relocation of Head Office to a new building |
|------|--|
| 2005 | Development of the second MURATA BOY |
| 2007 | Tsuneo Murata appointed as President Completion of a R&D facility inside the Head Office site |
| 2008 | Development of MURATA GIRL |



Murata Cheerleader

| 2012 | Acquisition of VTI Technologies Oy (now Murata Electronics Oy) |
|------|--|
| 2013 | Tokyo Denpa Co., Ltd became a wholly-owned subsidiary |
| 2014 | Development of Murata Cheerleaders |
| 2015 | Achieved net sales of one trillion yen |
| 2016 | Toko, Inc. became a wholly-owned subsidiary |
| | Acquisition of Primatec Inc. (now Ise Murata Manufacturing Co., Ltd.) |
| 2017 | Acquisition of the battery business of Sony Energy Devices Corporation |

Process of value creation

Treasure Murata Philosophy and pursue the unique qualities of Murata

We will continue to value Murata Philosophy, the Murata Philosophy, even in a changing business environment.

Employees around the world sharing Murata Philosophy will create innovation and new value by trusting and cooperating with each other to demonstrate collective strength.

Management strategies ⇒p25 Growth strategies ⇒p13 Murata's core competencies **⇒**p7 Global sales network enables anticipation of market changes and customer needs. Digitization of all types of objects The rise of IoT, AI and big data utilization Innovation driven by CS/ES Continuous R&D Higher functioning and investment enables new faster communication Strong Monozukuri product equipment apabilities enable development. timely supply Electric vehicles, ADAS, and automated driving Enhancement of information security Resource Murata Philosophy strategies **⇒**p35

Value proposition for society

Communication

Murata products ⇒p19

Piezoelectric

components

Power supplies

Smartphones that are always close by. Versatility with calling, e-mailing, SNS, gaming, and camera functions. Even faster communication speed and larger capacity. Murata contributes greatly to higher and more diverse functionalities.

Computers and peripherals

Thin laptop computers and tablet devices that can be easily carried and connected to networks are one of the indispensable items for daily life. Murata contributes to higher performance and more diverse functionalities in personal computers.

Automotive electronics

For a society where everyone can move freely with confidence while protecting the environment. Penetration of electric vehicles and completely automated driving. Murata provides automotive technologies for vehicles and all passengers.

Audio-visual. home and other

Home appliances used for daily living such as air conditioning equipment and televisions are required to further conserve energy and consider impacts on the environment and human health. Murata contributes to technologies that support smart and ecological living.

Energy and healthcare

Due to digitization and spread of IoT that connects different industries, the field of electronics has been expanding and new requirements for a smart society are emerging. Murata creates new value in sensing, communication, and miniaturization technologies with our cultivated expertise.

Vhat Murata wants to be

Murata's purpose is to explore our identity with intelligence, build a wider and deeper foundation for an electronics society, and contribute to enriching people's lives in the truest sense.

Innovator in Electronics

We continue to contribute to the advancement of society by creating innovative products and solutions

For that reason,
we express what we should be
by the phrase,
"Innovator in Electronics."
We are committed to being
a leading innovator
in the electronics industry
and taking the initiative in
working toward
a better environment
and society.



Murata's core competencies 1

We will increase our collective strength by enhancing and connecting respective strengths together.

Since most of our sales are generated from products with high shares in global markets, we have opportunities to communicate with many customers in a wide range of industries, which allows us to stay ahead of and anticipate customer needs.

Murata's strengths are in our global sales network, technological development capabilities, monozukuri (manufacturing) capabilities, and supply capabilities. We will increase our collective strength by combining these elements.

Innovation driven by CS/ES

"CS and ES," the values safeguarded by Murata, are the driving forces for innovation.

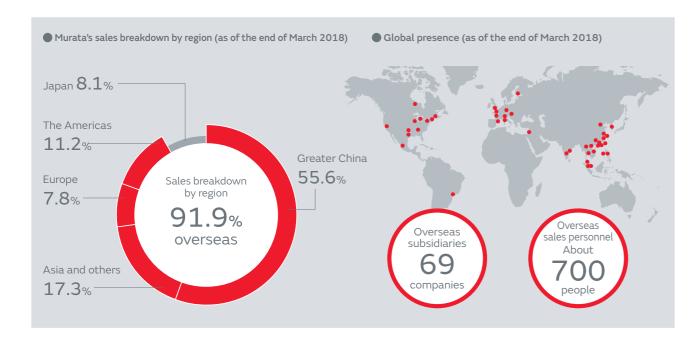
CS means "to create and provide value that customers appreciate," and ES means "each and every employee feels rewarded and continues to grow through his or her work."

Innovations and value that customers appreciate are created when each employee around the world feels rewarded and keeps growing while working together. Customer satisfaction then further raises employee motivation. Murata embraces this spiral effect.

Global sales network enables anticipation of market changes and customer needs

Over 90% of Murata's products are sold overseas.

A network is in place to provide Murata's services and products anywhere around the world, including in Japan, Asia, the Americas, and Europe. Using "marketing by everyone" as our motto, we leverage our global network to anticipate customer needs ahead of any other company, and each employee maximizes value offered to customers.



Continuous R&D investment enables new product development

Murata has built an integrated system of production from raw materials to finished products, and we have been independently developing various fundamental technologies, such as materials technology, and acquiring the expertise that other companies lack by continuously investing in R&D.

By having each production process independently refine technologies and cooperate, we are able to satisfy customer needs quickly.



Strong monozukuri capabilities enable timely supply

All technologies are directly in line with our markets and customers.

Murata's technologies are closely coordinated and integrated from materials to products. All technological departments move together and realize the provision of value to customers in a quick and timely manner.

Materials

Sheet casting

Sintering

Processing and finishing

processing and finishing

Academy of the control of the control

Murata has established technologies to precisely control ceramic materials and electrode materials that critically determine the properties of electronic components.

From ceramic sheets that are $1 \mu m$ or less in thickness to complexly shaped filters created by injection forming, we pursue "functional shapes."

When sintered, ceramic crystal structures shift to achieve certain properties. Sintering is a technique to control these invisible changes within a furnace.

Once materials have gained electric properties from the previous processes up to sintering, ceramics are formed into electronic components through various additional processing.

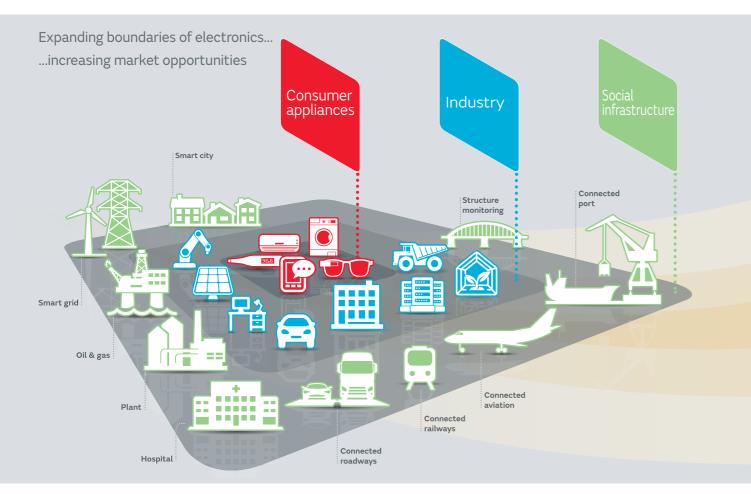
ucts are delivered to
us customers only if rigorous testing proves
ed that they are worthy of
the Murata label.



Murata's core competencies 2

Murata's business opportunities are expanding as objects become increasingly digitized.

All types of objects are being digitized in society around us, and business opportunities for Murata are further expanding. Markets in which Murata's technologies can be applied, such as communications, computer-related equipment, automotive electronics, and home appliances continue to expand, and we have a high product share in each field.



Murata's market share

Chip multilayer ceramic capacitors

Indispensable to electronic circuits, these components serve to store and adjust flows of electricity. They are key to the advanced functionality of smartphones and other mobile devices, and as they continue to become thinner and more compact are increasingly being incorporated into such information devices.

Application: Communications Application: Automotive electronics



Connectivity modules

Enabling various devices to access the Internet via radio signals, these modules lead the trend towards increasing multifunctionality and IoT in smartphones and in-vehicle equipment.

Application: Communications, computers and peripherals



SAW filters

The filters that extract only the required portion of a radio signal are key devices in high frequency circuits. With its unique miniaturization technology, Murata helps RF circuit downsizing.

Application: Communications



Timing devices

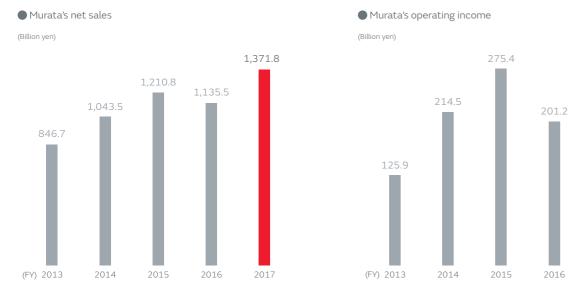
These are component parts that generate the clock signal in combination with the IC. As electronic outfitting of automobiles progresses, communication between ECUs is needed and timing devices that deliver a highly accurate, high quality clock signal are called for.

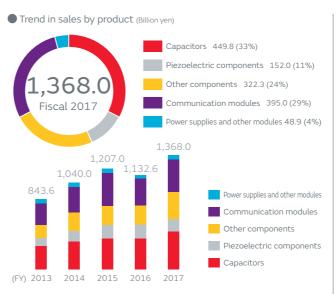
Application: Automotive electronics



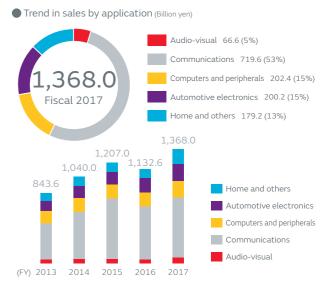








* Sales by product are for the main business of electronic components and related products.



* Based on the Company's estimate

09 10

162.1



Consolidated financial and non-financial highlights

| | (FY) 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--|------------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Operating results | | | | | | | | | | | |
| Net sales (Millions of yen) | 631,655 | 523,946 | 530,819 | 617,954 | 584,662 | 681,021 | 846,716 | 1,043,542 | 1,210,841 | 1,135,524 | 1,371,842 |
| Gross income (Millions of yen) | 243,813 | 125,834 | 147,942 | 202,895 | 170,878 | 202,197 | 292,438 | 414,336 | 498,787 | 432,395 | 444,277 |
| Operating income (loss) (Millions of yen) | 115,752 | (16,287) | 26,730 | 77,485 | 44,973 | 58,636 | 125,891 | 214,535 | 275,406 | 201,215 | 162,146 |
| Operating income / net sales (%) | 18.3 | (3.1) | 5.0 | 12.5 | 7.7 | 8.6 | 14.9 | 20.6 | 22.7 | 17.7 | 11.8 |
| Income (loss) before income taxes (Millions of yen) | 121,830 | (10,319) | 34,658 | 82,062 | 50,931 | 59,534 | 132,336 | 238,400 | 279,173 | 200,418 | 167,801 |
| Net income attributable to Murata Corporation (Millions of yen) | 77,413 | 3,588 | 24,757 | 53,492 | 30,807 | 42,386 | 93,191 | 167,711 | 203,776 | 156,060 | 146,086 |
| Shareholders' equity (Millions of yen) | 844,230 | 784,342 | 800,857 | 821,144 | 808,542 | 860,963 | 955,760 | 1,123,090 | 1,229,159 | 1,354,819 | 1,456,600 |
| Total assets (Millions of yen) | 1,030,349 | 909,327 | 928,790 | 988,508 | 1,000,885 | 1,087,144 | 1,243,687 | 1,431,303 | 1,517,784 | 1,634,999 | 1,797,013 |
| Net cash provided by operating activities (Millions of yen) | 106,357 | 76,521 | 107,303 | 105,610 | 57,589 | 88,537 | 185,751 | 259,936 | 252,451 | 243,920 | 225,249 |
| Net cash used in investing activities (Millions of yen) | (65,591) | (18,106) | (93,261) | (133,999) | (46,487) | (56,173) | (117,150) | (91,379) | (205,316) | (202,697) | (194,165) |
| Net cash used in financing activities (Millions of yen) | (32,492) | (43,814) | (22,379) | (14,561) | (9,148) | (9,655) | (40,899) | (66,966) | (56,614) | (11,729) | (83,585) |
| Cash and cash equivalents at end of year (Millions of yen) | 110,136 | 117,502 | 108,777 | 63,020 | 65,302 | 90,068 | 118,884 | 212,936 | 212,570 | 239,184 | 187,910 |
| Average exchange rate (Yen/U.S. dollar) | 114.28 | 100.54 | 92.85 | 85.72 | 79.07 | 83.11 | 100.24 | 109.94 | 120.14 | 108.42 | 110.86 |
| Indices | | | | | | | | | | | |
| Shareholders' equity ratio (%) | 81.9 | 86.3 | 86.2 | 83.1 | 80.8 | 79.2 | 76.8 | 78.5 | 81.0 | 82.9 | 81.1 |
| Basic earnings attributable to Murata Corporation per share (yen) | 349.09 | 16.48 | 115.35 | 249.23 | 144.35 | 200.81 | 440.63 | 792.19 | 962.55 | 733.87 | 685.86 |
| Net income attributable to Murata Corporation / shareholders' equity (%) | 9.3 | 0.4 | 3.1 | 6.6 | 3.8 | 5.1 | 10.3 | 16.1 | 17.3 | 12.1 | 10.4 |
| Shareholders' equity per share (yen) | 3,847.54 | 3,654.34 | 3,731.34 | 3,825.80 | 3,830.55 | 4,078.94 | 4,514.53 | 5,304.98 | 5,806.06 | 6,368.48 | 6,830.45 |
| Cash dividends per share (yen) | 100.00 | 100.00 | 70.00 | 100.00 | 100.00 | 100.00 | 130.00 | 180.00 | 210.00 | 220.00 | 260.00 |
| Capital expenditures (Millions of yen) | 125,557 | 65,427 | 22,868 | 56,752 | 68,445 | 77,662 | 68,197 | 101,184 | 172,540 | 158,579 | 306,608 |
| Depreciation and amortization (Millions of yen) | 65,134 | 80,978 | 69,896 | 61,795 | 61,008 | 72,323 | 76,884 | 84,935 | 99,105 | 113,523 | 141,625 |
| Research and development expenses (Millions of yen) | 42,281 | 46,832 | 41,649 | 39,778 | 40,978 | 48,766 | 54,649 | 64,990 | 77,982 | 81,809 | 94,181 |

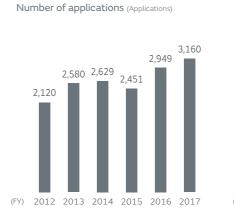
The consolidated financial statements are prepared in conformity with accounting principles generally accepted in the U.S.

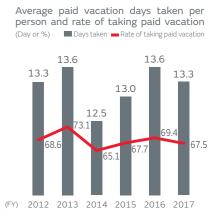












* Murata Manufacturing Co., Ltd. on a non-consolidated basis



Message from the President

"Contribute to development of a needed by customers and society

future to be achieved by electronics, continuing to be a company in any era"



Changes in the society surrounding us

Digitization of every type of "object" and Murata's expanding business opportunities

The appearance of electronics symbolizing the times – radios, color televisions, cameras, computers, mobile phones, and smartphones – has improved people's quality of life. The history of Murata has been with rooted in such progress in society. By supporting achievement of product functions to be required in each age, Murata has contributed to society and continued to be needed by society. Now, in this age, every type of "object" in our surroundings is being digitized and Murata is required to create new value by making use of its innovation.

Regarding smartphones which have driven the recent electronic parts market and rapid growth of Murata, volume growth has been moderate, but the number of functions increases, the number of electronic parts used per unit has drastically increased. Also, thanks to increasing speed and functions of communication due to movements such as the introduction of 5G, this is an area where growth is expected as a pillar of our business in the future.

The automobile industry is also seeing changes which Murata must not overlook. In Europe, China, India and other countries, entire nations are moving to shift the

Chairman of the Board and President

industry from gasoline and diesel vehicles to electric vehicles (EVs). Due to an accelerated shift to EVs, some estimates suggest that in 2040, EVs will account for more than 50% of global new car sales. Furthermore, in parallel with the shift to EVs, development of autonomous vehicles is accelerating. Automation to maintain lanes and distance between cars on expressways as well as to follow the vehicle ahead during congestion has started to come into wide use as a part of advanced driver-assistance systems (ADAS). Consequently, the number of sensors to be used for safe travel is increasing. In addition, high-speed wireless communication (V2X) associated with an increase of data traffic between cars and the outside world will be a requirement, alongside computer processing systems for large amounts of data inside a car in real-time. In terms of demand for parts over the medium term, it is said that with shifts to EVs and autonomous cars, the number of electronic parts used per vehicle will significantly increase compared to vehicles with internal-combustion engines.

In addition to further digitization of smartphones and cars, development of an IoT society is a trend to be noted. Against a background of an expanding IoT society where every type of object is connected via networks, an increasing number of devices will be connected to networks. Moreover, considering the expanding demand for base stations and servers which process and store data collected from those devices and high-speed computers which are used for new value creation using Al, demand for electronic parts used for these items will also grow by an order of magnitude faster than before, creating new demand for a significant amount of electronic parts.

Murata's strengths ensure we can seize business opportunities (chances)

Networks, technology development capacity, monozukuri capabilities, and organizational cooperation to integrate these elements

I believe that Murata has three strong points which enable us to steadily seize these expanding business opportunities and sustain growth.

The first is "'a global network and deep customer base through which we can speedily understand customer needs." Since its foundation, Murata's mainstay business has been capacitors and other general-purpose electronic parts. A large number of these general-purpose electronic parts are used for various kinds of electronic devices and Murata contacts customers in various fields all around the world. Therefore, we can quickly see the latest market information and needs. Murata has satisfied various customer needs worldwide and established a structure under which products and services are supplied stably. Currently, sales in overseas markets account for more than 90% of total sales and a large variety of products have captured the largest or second largest share in the global market. Furthermore, Murata's global network mostly consists of networks at our group organizations, enabling strong cooperation. Thus, we are able to communicate with many customers in various industries and quickly understand their demands and

The second is "'technology development capacity' which realizes customer needs." As trends in electronics markets change, to satisfy customer needs which are increasingly diversified with the times, Murata has expanded the boundaries of value that we can offer,

from smaller, higher performance single-function components to more highly functional device components, and further to modules incorporating those components and solutions. To create unique and highly competitive products, we are conducting technology development ahead of competitors and internally developing materials, processes, products and production technology for many products. These are vertically integrated for realizing rapid product commercialization.

The third is "'monozukuri (manufacturing) capabilities' ensuring mass production and timely delivery to customers." At Murata, each plant has independently and uniquely improved its processes over many years to enhance productivity and cost competitiveness. Through these accumulated technologies and expertise, reliable production can be realized on a large scale. Particularly, the production volume of multilayer ceramic capacitors, one of the core products of Murata, exceeds one trillion per year despite its highly complex production process, placing them on the largest scale in the manufacturing industry.

And then, the three strong points described above of networks, technology development capacity, and monozukuri capabilities are integrated through Murata's organizational cooperation. At Murata, each function of the value chain closely works together and by integrating individual strong points into that of the entire organization, Murata is making efforts to provide better value to customers.

Driving forces supporting strength

Penetration of the "Murata Philosophy" and innovation driven by CS/ES

As stated above, Murata has continued to demonstrate its unique strengths since its foundation, because the ideals and values shared by all employees work as driving forces.

Sharing of the "Murata Philosophy" as prescribed by our founder is placed in the most important position. Murata regards the "Murata Philosophy" as a philosophy which serves as a major guideline for its business activities. As the scale of business expands and employees are diversified, to demonstrate collective strength through cooperation among employees with a sense of unity, it is important that all employees understand the "Murata Philosophy" well as a common ideal. For example, innovation described in Murata Philosophy indicates that development of a pioneering spirit is important for any job in addition to avoidance of price competition through unique products with higher added value. Also, regarding contribution to the advancement of society, it links to continued awareness of the social significance of our company's existence.

The recent focus on "CS" and "ES" that Murata set out as important values is also a concept derived from a passage of Murata Philosophy - thankful for the increase in prosperity – in addition to the above.

We define "CS" as continuing "to create and provide value that customers appreciate" and "ES" as ensuring "each and every employee feels rewarded and continues to grow through his or her work."

Murata creates a virtuous cycle in its business activities by placing importance on the values of CS and ES to create new innovation. This virtuous cycle is a driving force for reinforcing Murata's strengths even further.

What we should be

Contribute to development of a new future as an "Innovator in Electronics"

In addition to contribution to society through products and services, Murata has established a CSR Charter with the Murata Philosophy as a benchmark and a CSR Management Committee to fulfill various types of social responsibility. For ongoing contribution to realization of a sustainable society, Murata needs to be a sustainable company. To this end, we need to face various social problems such as climate change and other environmental problems, as well as issues in human rights that should not be violated.

Sustainable Development Goals (SDGs) that are global issues to be achieved by 2030 are also great social issues that Murata should face. We believe that Murata's mission is to contribute to solving these issues and create new value for society through business ac-

We at Murata aim to contribute to realization of true quality of life for people. For this purpose, we express what we should be through the words of "Innovator in Electronics," and enthusiastically commit ourselves to lead innovation in the electronics industry and take autonomous action for the environment and society.

Currently, Murata's network has expanded globally. Creation of innovation through connection of each and every employee in the world is important for Murata to provide the value which customers worldwide appreciate and continue to make our future richer and better. We will write the story of Murata, which continues to contribute to a new future, placing importance on ideas embodied in Murata Philosophy.





Murata's Mid-term Business Plan

Murata has prepared the "Mid-Term Direction" that includes actions to be taken over a three-year period for achieving the long-term vision and sustainable growth. The Mid-Term Direction is reflected in the Mid-term Policy of each department, which works as a basis for the Annual Policy. In October 2018, we issued the "Mid-term Direction 2021" as an action policy for the next three years (fiscals 2019-2021).

Murata's policy management system



Long-term vision (Vision2025)

Where Murata wants to be in 2025

Innovation driven by CS/ES

ALL Murata employees collaborate with one another, innovate, and create new value.

Global No.1 Component & **Module Supplier**

Murata aims to become the firstchoice supplier in the target segments of each business while expanding the nature of value provision from parts to

Innovator in "" Electronics solutions. Innovation

Foundational markets, Challenging markets, Next New markets

Acquire and enhance core competencies, and achieve the following:

- 1. Automotive as a foundational market following Communication market, as a pillar of profit.
- 2. Continue to challenge in Energy and Medical/Healthcare markets.
- 3. Explore promising NEXT NEW markets.

We will reinvent the value provided to customers and the structure of all work that supports them.

Continue to create and provide value that customers appreciate.

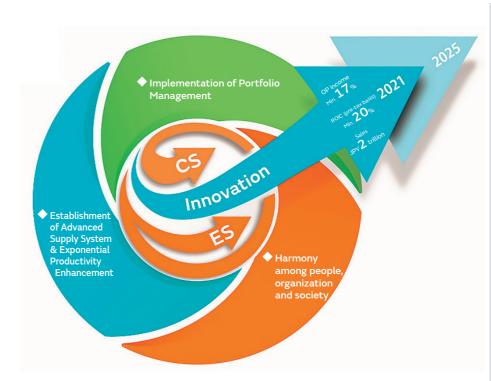
Each and every employee feels rewarded and continues to grow through his/her work.

Mid-term Direction 2021 (fiscals 2019 to 2021)

Murata has rapidly expanded the scale of the company for the last several years through business expansion in the communications market and a series of M&As. Murata's business opportunities will further grow thanks to digitization of all types of "objects." For the next three years, we will strengthen our business and management foundation, including systems and organization, in accordance with the expanding scale of the company, and aim for healthy growth so that we can provide value that satisfies customers by seizing expanding business opportunities and allowing each and every employee feel rewarded as they continue to grow.

Murata focuses on strengthening "Business & Management Foundation" in order to seize expanding business opportunities and realize Healthy & Sustainable Growth.

3 corporate-wide issues (3 pillars) for Healthy & Sustainable Growth.



"Resolution of issues and what we aim for"

Implementation of portfolio management

Murata's portfolio consists of "global No.1 products" which are the first choice of customers, and Murata creates further customer value by designing or proposing combinations of individual technologies and prod-

Establishment of advanced supply system & exponential productivity enhancement

While meeting QCDS requirements to satisfy customers, Murata has achieved both exponential enhancement of capital and labor productivity and a stable supply system that responds to changes in demand.

Harmony among people, organization and society

Murata is a company trusted by society and one that responds to changing business opportunities through an evolving structure of work and organization in accordance with growth of each and every employee and business.

Strategy by product (Components) Net sales 924.1 billion yen VOY Up 21.3%

Capacitors



Main products

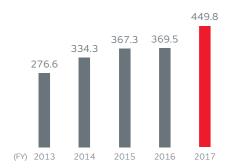
Multilayer ceramic capacitors, Polymer aluminum electrolytic capacitors, Trimmer capacitors, Supercapacitors, Single layer microchip capacitors, Variable capacitors, Silicon capacitors, High temperature film capacitors for automotive,



Operating results

For fiscal 2017, sales of multilayer ceramic capacitors (MLCCs) for communications equipment, the main product in this category, grew significantly as demand increased in a broad range of applications. New products for new smartphone models achieved much higher sales, as did MLCCs for car electronics as a result of progress in vehicle electrification. As a result, overall net sales increased to 449.8 billion yen (up 21.7% year-on-year).

Net sales (Billion yen)



Initiatives in the capacitor business

Murata is reviewing fair prices of MLCCs in addition to its product portfolio to respond to rapidly growing demand for capacitors. Also, Murata has been developing new products ahead of competitors and expanding a global production system while maintaining high quality.

To expand the boundaries of the capacitor business, we will add film capacitors, silicon capacitors, and other non-ceramic products to our portfolio and offer new proposals with high reliability suitable to use environments in the automobile and healthcare/medical markets.

Chip multilayer ceramic capacitors for consumer

The chip multilayer ceramic capacitor (MLCC) is an electronic component with external electrodes electrically and mechanically bonded to a substrate, attached to repeatedly stacked internal electrodes and ceramic dielectrics such as titanium oxide and barium titanate. It is a highly reliable nonpolar capacitor with high withstanding voltage and insulation resistance, superior frequency and heat-resisting characteristics, and long service life.

MLCCs are employed in mobile devices and home appliances as well as IT devices and network infrastructure equipment as they can temporarily store and discharge electricity, absorb noise in signals, extract signals with certain frequencies, and block direct current and pass alternating current only. MLCCs are also used for applications for which high reliability is required, including automotive, medical, and aerospace equipment. In particular, 600 to 1,000 MLCCs are used in one high-end smartphone. Even low-end or midrange models use 300 to 600 MLCCs per unit.

Regarding consumer MLCCs, to meet market demands particularly for those smaller in size, various products have been developed and have become highly competitive capacitors. Recently, the main product size has shifted from 1005M (1.0X0.5 mm) to 0603M (0.6X0.3 mm) and for wearable devices and small modules, consideration for adoption of 0201M (0.25X0.125 mm), the smallest size commercialized in 2014, has been increasing. Since market needs are expected to grow further for smaller components and high density mounting, Murata will continue to improve its ceramic material pulverization and multilayer technology and propose new product design and easier to use solutions.

Demands for MLCCs are rapidly expanding in every market. Murata will expand its business, centering on small products with large capacities for which production is difficult for competitors due to material and technical issues.

Chip multilayer ceramic capacitor for automotive

For automotive MLCCs, stricter regulations have been set out than those of consumer MLCCs in the areas of product material selection, design standards, product performance, and process management to achieve higher reliability and longer product life, even though materials and processes are generally the same as those in consumer MLCCs.

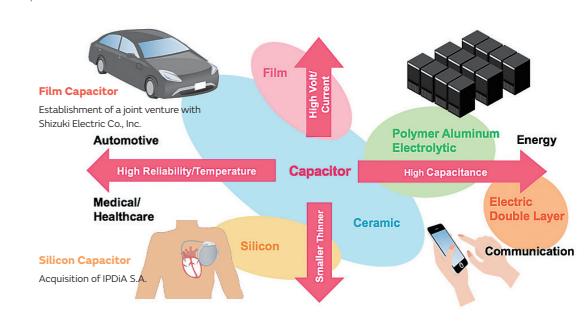
MLCCs have been increasingly adopted for safety applications such as airbags and ABS in addition to hybrid and electric vehicles that have become increasingly widespread, and production of these packages is rapidly increasing. Moreover, components employed by many customers are becoming smaller and the main size is shifting to 1005M (1.0X0.5 mm) from 1608M (1.6X0.8 mm). Also, these satisfy requirements of temperature cycling tests and high temperature and high humidity load tests at 150°C, a step up from the previous guarantee of 125°C. Furthermore, more products meet requirements specific to in-vehicle applications regarding static electricity and surge tests (ISO7637-2). Recently, products which can be used in higher temperature environments are in demand.

To respond to tough market demands as stated above, Murata has developed more reliable materials, ensured product design margins, and established strict inspection standards for the production process to realize highly reliable products suited to use environments. In 2017, Murata succeeded in commercialization of products resistant to 200°C despite the use of lead type resin-coated MLCCs, and customer companies are considering adoption. Furthermore, various types of MLCCs according to the use environments have been commercialized, such as water-repellent products and MLCCs with metal terminals jointed.

Also in automotive MLCCs, Murata will continue to create new value for society by developing ceramic materials and improving process and inspection technologies toward creating smaller, more highly reliable and higher performance components.

Moreover, there is a strong desire in the automotive market for the stable supply of Murata's highly reliable components, and to respond to such expectations as the market leader, we are making maximum equipment investment at domestic and overseas plants. Murata delivers products with safety and security by identifying customers' product and supply needs as a continuously trusted company.

Murata capacitor field



Strategy by product (components) Net sales 924.1 billion yen VOY Up 21.3%

Piezoelectric components





Main products

SAW filters, Ultrasonic sensors, Resonators, Trimmer capacitors, Piezoelectric sensors, Ceramic filters, etc.



SAW filters

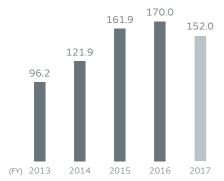


Ultrasonic sensors

Operating results

For fiscal 2017, substantial reductions in the production and prices of Chinese smartphones caused a sharp sales decline for SAW filters. As a result, overall net sales were 152.0 billion yen (down 10.6% yearon-year).

Net sales (Billion ven)



SAW filters

Murata's SAW devices are actively working inside smartphones and other devices by using the state-of-the-art technologies to reduce noise during communication and create an environment where users can enjoy SNS and other services without stress.

Applying the surface acoustic wave (SAW) discovered by an English seismologist, Murata has continued to offer the very best products from the early 1980s by making use of original materials, the latest production facilities, the most advanced R&D structures, and distribution channels seamlessly supporting the entire world. Currently, Murata holds the majority of the market share of SAW devices for smartphones.

With the 2020 Tokyo Olympics, 5G service with transmission speeds 100 times faster than current technologies will be fully commercialized. With this trend, increasingly smaller and higher frequency SAW devices with superior composite performance will be a requirement. Murata has been leading the world in responding to these market needs by making use of the most advanced circuit simulation technology and multilayer technology. We will enhance our presence as a pioneer of SAW devices in the future by improving the lineup of I.H.P. SAW devices in addition to existing SAW devices.

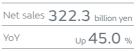
Ultrasonic sensors

For half a century, Murata's ultrasonic sensors have supported external environment recognition with ultrasonic sensors using its device technology. Murata has accumulated original technologies such as piezoelectric ceramics and sound designs of sensors for various applications, including consumer and industrial uses. Using Murata's unique knowledge as stated above, Murata will continue to respond to advanced market needs through technology development and proposals for new devices.

Regarding automotive uses, demand for ultrasonic sensors is rapidly increasing as sensors indispensable to the evolution of vehicles in areas including automatic parking and starter inhibitors, have advanced from proximity warning applications for parking support. We intend to develop new products which cover both short and long distances with one sensor and contribute to the development of safe and comfortable cars.

In the IoT sector that includes products such as smartphones, Al speakers and HEMS/BEMS, which are expected to grow, ultrasonic sensors are one of the important options as sensors that detect user movement while securing privacy. Murata is carrying out new development for realizing much smaller products and enhancing resolution, including SMD ultrasonic sensors which we were the first in the world to commercialize.

Other components





Main products

Inductors (coils), EMI suppression filters, Connectors, Sensors, Thermistors, Lithium-ion batteries, etc.



Inductors (coils)

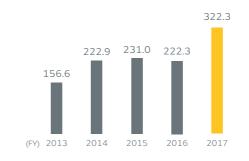


Lithium-ion batteries, Micro batteries

Operating results

For fiscal 2017, this segment achieved substantial sales growth due to growth in demand for coils, EMI suppression filters, and MEMS sensors for automotive electronics. The lithium-ion battery business also contributed to success, with the acquisition process from Sony Corporation being completed in September 2017. As a result, overall net sales were 322.3 billion ven (up 45.0% yearon-year).

Net sales (Billion yen)



Inductors (coils)

Chip inductors are passive components that are a part of electronic circuits, alongside capacitors and resistors. Typical products include power inductors used for power supply circuits and RF inductors used for high frequency circuits.

Power inductors are deeply related to power conversion efficiency that is important in the performance of DC-DC converters, and performance required for products is different depending on circuit systems in DC-DC converters and operating conditions. Therefore, Murata applied a multilayer process and ferrite winding process to commercialize power inductors suitable for target applications and use conditions and has delivered these to the markets.

Through business integration with TOKO, Inc. in 2016, Murata introduced the Metal Alloy winding process and realized smaller and higher performance products. Also, Murata differentiates itself from other companies through advantages including well-balanced performance compatible with large currents that is a feature of Metal Alloy technology, and excellent performance stability during operation. As for RF inductors, we have obtained a large market share by delivering various kinds of products which enable downsizing, as smartphones have replaced conventional mobile phones. Recently, the number of electronic parts used for vehicles has been increasing further due to the shift to EV, ADAS, and automated driving. In response, Murata will expand the lineup of compact inductors with high performance and high reliability and meet market needs.

Lithium-ion batteries

Murata's lithium-ion batteries are classified into laminated or cylindrical type batteries. Laminated type batteries are mainly employed for mobile devices as sizes can be freely changed owing to the laminate film exterior material. Murata uses leakage-free gel electrolytes with high safety characteristics, which do not easily swell compared to liquid electrolytes used by other companies. Murata's cylindrical type batteries have advantages particularly in high output applications widely used for gardening tools, power tools, electric bicycles, cleaners, and other fields.

Murata intends to grow by appealing to customers with higher safety for the laminated type and by continuing differentiation with higher output for the cylindrical type in gardening tool and other markets where electrification is accelerating. In addition, by integrating battery modules with cylindrical cells, and the efficient power converter technology and sensor network technology owned by Murata, we will provide an energy management system centered on the housing and industrial markets.

Murata will carry out these initiatives by integrating Murata's production technology and processes and Sony's knowledge on batteries and battery materials.

Strategy by product (modules) Net sales 443.9 billion yen YoY Up 19.7%

Communication modules



Main products

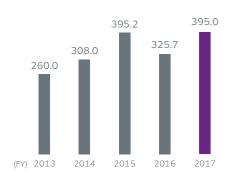
Connectivity modules, RF modules, MetroCirc™, etc.



Operating results

For fiscal 2017, circuit ceramic modules and RF sub modules for high-end smartphones faced sluggish sales due to a reduction in the Murata share of orders won from a specific customer. However, short-range wireless communication modules for products such as smartphones and personal computers were successful. Sales in multilayer resin substrates also achieved substantial growth as an increasing number were used in high-end smartphones. As a result, overall net sales were 395.0 billion yen (up 21.3% year-on-year).

Net sales (Billion yen)



Connectivity modules

Connectivity modules are compound components for wirelessly accessing the Internet or other devices from various devices.

These are used in various types of familiar devices such as smartphones, tablets, digital cameras, home appliances, and car navigation systems, and enable users to download and upload photos and music from the Internet, call hands-free while driving, and confirm air conditioner operation and turn switches on and off remotely.

An IoT society where all types of objects around us are connected to the Internet is just around the corner. In this IoT society, various types of devices will have wireless communication functions. Requirements vary depending on use such as low power consumption, high-speed data communication, high reliability, and low profile.

Murata provides products compatible with new communication technologies such as WiFi, 5G, and V2X through design technologies for smaller and higher performance products alongside software technologies to enhance connectivity, while contributing to the development of an IoT society as our mission in creating the future of electronics.

MetroCirc™

MetroCirc™ is a multilayer resin substrate comprising resin sheets using LCP film and copper foil sheets stacked in many layers employing Murata's multilayer technology. It has exceptional RF characteristics and does not require any adhesion layer, making it thinner. Furthermore, it facilitates a flexible bending process and is thus said to be an origami-like substrate. Through various circuit designs, it can function not only as a substrate but also as a transmission wire component, or have integrated coil functionality. Thanks to these characteristics, it contributes to smaller, thinner, and higher performance smartphones and wearable devices.

Because of its RF characteristics and low transmission loss properties, MetroCirc™ will prove its worth and is expected to expand its uses for various applications including substrates for millimeter wave modules, millimeter wave transmission lines, and wired high speed differential transmission lines. Murata will continue to offer high value added products for resolution of customer issues by making the most of Murata's advanced film and multilayer technologies.

RF modules

Murata's RF modules are multifunctional and high performance electronic component units that realize an analogue high frequency circuit that controls communications among wireless devices by integrating various key devices.

This module is comprised of passive devices such as SAW filters which demultiplex high frequencies and LC filters, high power amplifiers in transmission, low distortion amplifiers in reception, antenna changeover switches, and other semiconductor devices, and is actively used for various types of wireless devices including smartphones and other mobile phones and tablet PCs.

With the arrival in the future of the high speed and large capacity 5G service, which will enhance people's

quality of life, RF modules for realizing dual connectivity in addition to multiple frequency bands and carrier aggregation will become necessary.

Murata, which internally develops various key devices that form the basis for module configuration and package technologies for modularization, is able to carry out integrated production. As a result, Murata has a strong competitive advantage in terms of business speed, production capability, and quality, in addition to performance.

Murata will leverage these competitive advantages to propose RF modules most suitable to new markets and customer needs and aim to be a leading company to be selected by customers.

Power supplies and other modules

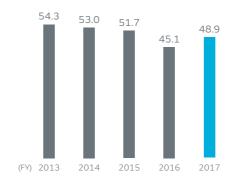


Power supplies, etc.

Operating results

For fiscal 2017, power supplies mainly for office automation equipment recorded sales growth. As a result, overall net sales were 48.9 billion yen (up 8.3% year-on-year).

Net sales (Billion yen)



Power supply modules

Changes in the business portfolio of power supply module business are currently underway. Murata continues in its process to divest the conventional custom power supply business and aims to develop high value added products by utilizing Murata's strengths as differentiating factors.

Murata's power supply modules featuring high reliability, high efficiency, and high power density are used for markets including servers, datacom, communications devices, in-vehicle systems, and industrial electrical equipment.

In the future, 5G service will be common in the communications device market where data traffic will increase from the expansion of big data. Also, in the in-vehicle system market, as the range of electronic components grows with higher functionality, highly efficient, compact power supplies with higher power density will increasingly become requirements.

To meet these market demands, Murata will provide compact power supply modules developed by integrating power circuit technologies, RF technologies, self-manufacturing of key devices, and highly reliable packaging technologies accumulated over many years, as well as highly efficient, high power

density power supply systems as power supply solutions combined with batteries to contribute to both increased functionality and energy saving of electronic devices.



DC-DC converters



Our basic views and initiatives to date on corporate governance

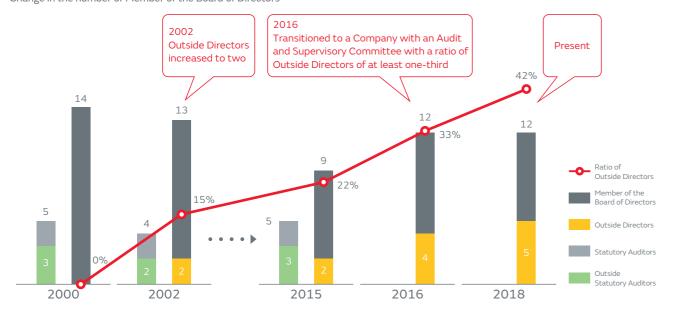
Murata considers corporate governance to be one of the highest priorities in management, and we work constantly to establish and operate optimal management systems that will realize sound corporate growth and development while taking into consideration every stakeholder.

Based on the idea that it is important to adopt "perspectives from outside the Company," we first appointed Outside Statutory Auditors in 1971 and Outside Directors in 2001. In recent years, we have enhanced the diversity of Outside Directors and increased the ratio of Outside Directors. After transition to a Company with an Audit and Supervisory Committee in 2016, the ratio of Outside Directors is at least one-third. In addition to appointing outside executives, we have long made efforts to strengthen our corporate governance by steadily taking measures as below, in order to strengthen executive and supervisory functions and increase the transparency of management.

History of initiatives to strengthen corporate governance

| , | |
|------|--|
| | Initiatives at Murata Manufacturing Co., Ltd. |
| 2000 | Established a Vice President system and declared the appointment of Outside Directors Established the Management Executive Committee |
| 2001 | • First appointed Outside Directors *In 2002, the number of Outside Directors was increased to two. *In 1971, we first appointed Outside Statutory Auditors. (We have had full-time Outside Statutory Auditors in the past.) |
| 2002 | • Established the Corporate Ethics Policy and Code of Conduct |
| 2004 | Abolished the Directors' retirement benefits system Established the Remuneration Advisory Committee Established the Internal Control Committee and the Audit Office (currently Office of Internal Audit) |
| 2006 | • Established the basic policy on the internal control system |
| 2007 | Established the CSR Management Office |
| 2008 | • Established the CSR Committee (currently the CSR Management Committee) |
| 2015 | ● Established the Corporate Governance Guidelines ● Established the Nomination Advisory Committee |
| 2016 | Transitioned to a Company with an Audit and Supervisory Committee (Outside Directors represent more than one-third of the Directors.) |
| 2017 | • Introduced a restricted share remuneration plan |

Change in the number of Member of the Board of Directors



Adoption of "Company with an Audit and Supervisory Committee" as a governance system

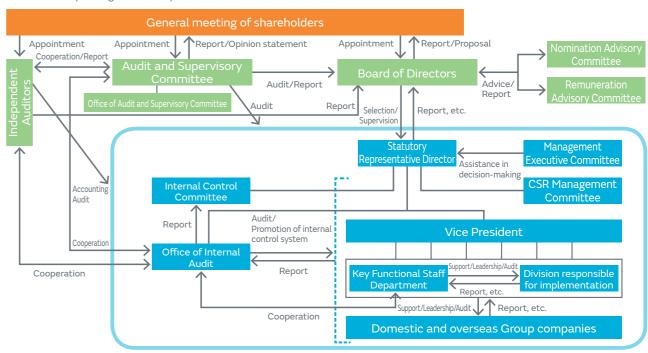
Murata Manufacturing Co., Ltd. adopted the Company with an Audit and Supervisory Committee structure as a corporate governance system, having transitioned from a Company with a Board of Statutory Auditors in 2016.

In a Company with an Audit and Supervisory Committee, a Board of Directors may delegate decisions on important matters for execution to Executive Directors. By delegating each decision on matters for execution to Executive Directors, more rapid management judgment and more flexible execution can be realized, while the Board of Directors can focus on discussion and monitoring relating

to management policy and business strategy, leading to enhancement of the functions of the Board of Directors.

In addition, Member of the Board of Directors who are Audit and Supervisory Committee Members hold voting rights on agendas at the Board of Directors and rights to express their opinions as the Audit and Supervisory Committee concerning appointment and remuneration of Member of the Board of Directors at General Meetings of Shareholders. We believe that this ensures strong supervisory functions by Executive Directors.

Structure of corporate governance system



Board of Directors

The Board of Directors decides on our basic management direction and particularly important matters for execution, and supervises duties implemented by Member of the Board of Directors. We have strengthened its monitoring function since we became a Company with an Audit and Supervisory Committee structure.

It is currently made up of 12 members, of whom five are Independent Outside Directors, a ratio of more than one-third.

Audit and Supervisory Committee

The Audit and Supervisory Committee audits duties implemented by Member of the Board of Directors and may state their opinions in relation to appointment and remuneration of Member of the Board of Directors at General Meetings of Shareholders.

It is currently made up of four Member of the Board of Directors who are Audit and Supervisory Committee Members, of whom three are Independent Outside Directors. Three of the Member of the Board of Directors who are Audit and Supervisory Committee Members possess a considerable degree of knowledge in the areas of finance and accounting. The Committee has one full-time member who shares information concerning the status of operations and corporate finances with part-time members.

Nomination Advisory Committee/Remuneration Advisory Committee
These Committees has been established as advisory bodies for the
Board of Directors in order to enhance its independence, objectivity,

and accountability in relation to the nomination and remuneration of executives. Each committee is made up of two Independent Outside Directors and two Inside Directors.

Management Executive Committee

The Management Executive Committee has been established as a deliberative body to assist the Board of Directors and the Representative Director in making decisions. It is made up of executive Member of the Board of Directors and Member of the Board of Directors who concurrently serve as Vice Presidents, creating a system for deliberation on management issues specified by the Company regulations.

Internal Control Committee

The Internal Control Committee is responsible for the maintenance and continual improvement of the system to secure the appropriateness of company operations (the internal control system) and evaluates the status of maintenance and operation of the system.

CSR Management Committee

The CSR Management Committee has been established to continuously and systematically promote CSR management and further entrench CSR within the Company and offers unified responses outside the Company.

Vice President

In order to realize more rapid management judgments and more flexible execution, a Vice President system has been introduced, and our Vice Presidents execute their duties with authority and responsibilities.

Analysis and evaluation of effectiveness of the Board of Directors

The Company endeavors to improve the effectiveness procedure and results.

A questionnaire for all Member of the Board of Directors

As a result, the Board of Directors of Murata Manufacturing Co., Ltd. has been assessed to be functioning with sufficient overall effectiveness in consideration of its

The Company continued from the previous fiscal year to

Views on appointing Member of the Board of Directors

By implementing a Vice President system and separating

execution and supervision, the Company has an appropriate

scale in the number of persons for the Board of Directors to

In consideration of the business content, scale, and

management environment, etc., of Murata, personnel with

knowledge, experience, and qualities that can contribute to

enabling the Board of Directors to function (determination of

basic management principles and important business execu-

tion, as well as supervision of execution of duties of Member of

the Board of Directors) are selected as candidates for Member

of the Board of Directors taking into account the balance and

diversity in the expertise, experience, and capabilities of the

Additionally, in appointing Outside Directors, the Company

seeks personnel across a wide and diverse range and works to

secure candidates who satisfy the independence standards of

the Tokyo Stock Exchange and Murata Manufacturing Co., Ltd.

of Directors who will be Audit and Supervisory Committee

Members, as noted above, the Company selects personnel

with a wealth of knowledge and experience regarding

management administration and business operations who

have qualities that can contribute to improvement in the

soundness and transparency of management and audit the

business execution of Member of the Board of Directors from a

fair and objective standpoint. At least half of the Member of the

Board of Directors who are Audit and Supervisory Committee

In particular, with regard to candidate Member of the Board

overall Board of Directors as a whole.

and Independence Standards and Qualification

function.

27

[Summary of the Criteria for Independence]

(1) The person is not an executive of the Company or its current subsidiary or a company that was a subsidiary within the past three years.

of deliberation time and so forth with a view to spending

more time on discussion and monitoring relating to

management policy and business strategy. As a result, the

Company recognized improvements such as the addition

of agendas relating to medium- to long-term strategy and

The Company recognizes that there is room for further

improvement to make the Board of Directors more effec-

tive, such as innovation in the creation of meeting materials

Based on these evaluation results, the Company will

continue working to further improve the effectiveness of

securing sufficient time for discussion.

and methods of explaining proposals.

the Board of Directors.

- (2) The person is not currently a major shareholder or an executive of a major shareholder.
- (3) The person is not an executive of a company, etc., that is currently a significant client or supplier or was a significant client or supplier within the past three years with the Company or its current subsidiary.
 - * "Significant client or supplier" refers to one with which the Company has transactions of 2% or more of consolidated net sales of the Company or of the client or supplier.
- (4) The person is not an executive of an organization that has received within the past three years a donation or grant of over 10.00 million yen per annum from the Company or its current subsidiary.
- (5) The person is not an executive of a company or a subsidiary of that company, that employs or has employed within the past three years a Board Member, Statutory Auditor, or Vice President of the Company or its current subsidiary.
- (6) The person does not have any significant transaction relationship with the Company, such as a consulting or advisory agreement, and has not had a significant transaction relationship in the past.
- (7) The person is not an executive of the Independent Auditor of the Company.
- (8) The person is not the spouse or a relative within the second degree of kinship, etc., of a Board Member, Statutory Auditor, or Vice President of the Company or its current subsidiary
- (9) The person does not carry the risk of creating a constant substantial conflict of interest between the Company's general shareholders as a whole for reasons other than those considered in (1) through (8) above.

of the Board of Directors by conducting an analysis and evaluation of the effectiveness of the Board of Directors as a whole once a year and discloses an overview of the

and interviews with Outside Directors were conducted and the evaluation was conducted through multiple discussions in the Board of Directors, making reference to the results of the questionnaire and interviews.

duties and obligations.

review again the selection of proposals and the allocation

With respect to remuneration for Member of the Board of Directors, Murata Manufacturing Co., Ltd. makes it a basic policy to provide a system and level of remuneration that is considered suitable for executive-level managers of a globally competitive electronic equipment and component manufacturer in order to ensure recruitment of human talent considered to be excellent based on a comparison with same-industry competitors, to raise the morale and motivation to improve financial results, and to contribute to the maximization of corporate value.

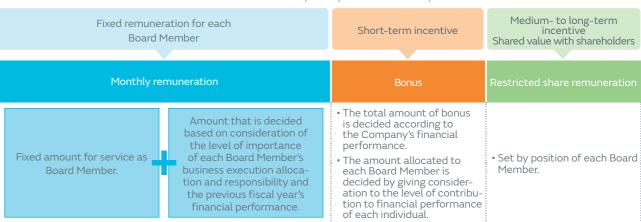
Views on remuneration for Member of the Board of Directors

Remuneration for Member of the Board of Directors who are not Audit and Supervisory Committee Members is made up of (i) monthly remuneration, (ii) bonus with the aim of giving a short-term incentive, and (iii) share-based remuneration with the aim of making them further share values with our shareholders by giving a medium- to longterm incentive.

The remuneration paid to Outside Directors who are not Audit and Supervisory Committee Members and to Member of the Board of Directors who are Audit and Supervisory Committee Members is only monthly remuneration. The amount paid to each Board Member who is an Audit and Supervisory Committee Member is decided as a fixed individual remuneration through discussion by the Member of the Board of Directors who are Audit and Supervisory Committee Members.

Composition of remuneration for Member of the Board of Directors

(Remuneration for Member of the Board of Directors who are not Audit and Supervisory Committee Members)



Internal control system

The Board of Directors of Murata Manufacturing Co., Ltd. has defined a basic policy* regarding the maintenance of a system to secure the appropriateness of company operations (internal control system). Based on this, the Company works to appropriately maintain and operate the internal control system.

The Murata Manufacturing Group shares Murata Philosophy that acts as a fundamental management policy, and in order to embody it, we have defined a fundamental policy and code of conduct, which have been distributed across the Group. In addition, we have established regulations and procedures regarding decision making. Based on these, deliberations are made regarding the business operations of subsidiaries, in addition to sharing various information regarding business operations of the Murata Manufacturing Group. Divisions that supervise the various business functions (general administration, personnel, accounting, etc.) of the Murata Manufacturing Group define frameworks, processing procedures, and judgment standards for duties to ensure that duties within the Murata Manufacturing Group are performed appropriately and efficiently, in addition to providing appropriate direction to subsidiaries as required. As an independent body, the Internal Audit Department (Office of Internal Audit) evaluates and monitors whether or not duties within the Murata Manufacturing Group are conducted appropriately and efficiently, adhering to laws and regulations and the internal regulations, etc. of the

* For details on the basic policy regarding the maintenance of the internal control system, please see "1. Basic Views on Internal Control System and Progress of System Development" of "IV. Matters Related to Internal Control System" in the Corporate Governance Report of Murata Manufacturing Co., Ltd.

28

Members appointed by the Company are Outside Directors.



Member of the Board of Directors *indicates Representative Director

Tsuneo Murata 1

Chairman of the Board and President* Nomination Advisory Committee Member (Committee Chairperson) Remuneration Advisory Committee Member

Tsuneo Murata has been involved in the running and management of domestic and overseas business and sales divisions, accumulating a wealth of experience and a solid re-

Hiroshi Iwatsubo 5 Member of the Board of Directors

Hiroshi Iwatsubo has been involved in technology development and business management, planning, and sales, accumulating

record of achievement.

a wealth of experience and a solid

Yoshiro Ozawa 2

Member of the Board of Directors Audit and Supervisory Committee Member (Full-time/Committee Chairperson)

Yoshiro Ozawa has been involved in accounting, finance, and personnel affairs in Japan and overseas, and has extensive experience and insight in these fields.

Yoshitaka Fujita 2

Vice Chairman of the Board Nomination Advisory Committee Member Remuneration Advisory Committee Member

Yoshitaka Fujita has been involved in accounting and financial duties and management, accumulating a wealth of experience and a solid record of achieve-

Yoshito Takemura 6

Member of the Board of Directors

Yoshito Takemura has been involved in accounting and financial duties, planning, and business management in the USA and Greater China, accumulating a wealth of experience and a solid record of achievement.

Outside Director Audit and Supervisory Committee Member Remuneration Advisory Committee Member

Hiroshi Ueno has abundant experience and insight in government administration of such fields as tax and finance, as well as operation of Antimonopoly Act.

Toru Inoue 3

Outside Director

insight in accounting.

Outside Director

Member of the Board of Directors*

Toru Inoue has been involved in

business management, planning, and accounting, accumulating a wealth of experience and a solid record of achievement.

Hiroaki Yoshihara 7

Nomination Advisory Committee Member

Hiroaki Yoshihara has worked as

an executive and consultant at an

international consulting firm, has

extensive experience solving man-

agement problems for global companies, and has specialized

Audit and Supervisory Committee Member

Takashi Shigematsu 8

Norio Nakajima 4

Member of the Board of Directors*

Norio Nakajima has been involved

in technology development and

business management, accumu-lating a wealth of experience and

a solid record of achievement.

Outside Director Nomination Advisory Committee Member

Takashi Shigematsu has exten-

sive experience and insight as an executive in the manufacturing industry and the automotive industry in particular.

Hiroshi Ueno 10 Hyo Kambayashi 🗓

(Committee Chairperson)

Hyo Kambayashi has been engaged in affaires concerning financial auditing, internal control advising, risk management, and strengthening governance for many years as a certified public accountant and executive and has extensive experience and insight in corporate accounting, auditing and

internal control.

Yuko Yasuda 12

Outside Director Audit and Supervisory Committee Member Remuneration Advisory Committee Member

Yuko Yasuda has engaged in introducing, assessing, and developing CEOs and evaluating the effectiveness of the Board of Directors for many years as a Japan Director at companies that search for corporate executive candidates, and she has extensive experience and insight in fields concerning executive personnel assessment, development and corporate





Vice Presidents (24, of whom four concurrently serve as Member of the Board of Directors)

Senior Executive Toru Inoue Vice President Norio Nakajima Executive Satoshi Sonoda Vice President Hiroshi Iwatsubo

> Kenichi Mizuno President Hideki Maruyama

Vice

Takehiro Konoike President Yutaka Tada Toshikazu Sasaki Etsuo Hayakawa Nagato Omori Yoshito Takemura Ken Tonegawa Norio Sakai Shinji Nomura Masahiro Ishitani Takaharu Sakai Noriyuki Kubodera Hiroichi Kawahira Ryuji Miyamoto Toshihiko Okamoto Yoshihiro Yamada

Toshinobu Yamazaki

Masanori Minamide

Message from Outside Directors



Director (Independent) of HOYA CORPORATION
Board Member of the Company since June 2008
Board Member and Audit and Supervisory Committee Member of the Company since June 2016 Board Member of the Company since June 2018

Term of office: 10 years Attendance at meetings of the Board of Directors in FY2017>

10 out of 10 meetings Attendance at meetings of the Audit and Supervisory Committee in FY2017> 11 out of 11 meetings

Supervise the planning and execution of management strategies to become a genuine global leader

Outside Director Hiroaki Yoshihara

In a continually changing business environment, including one with uncertain geopolitical risks, complicated international relations, and intensifying competition in technology development, Murata is growing in the global market as an "Innovator in Electronics that contributes to the advancement of society by creating innovative products and solutions." In seeking to be the world's top supplier of components as a genuine global leader, it is increasingly important to focus on allocation of resources to priority markets where

Murata has strong core competence, appropriate business portfolio management designed for competitive advantage, maximizing synergistic effects from proactive M&A business integration, and development and utilization of diverse and global human resources. In order to continuously improve corporate value in response to stakeholders' mandates, I will supervise the speedy planning and execution of management strategies by the Executive Directors, from an independent perspective as one of the Outside Directors.

Outside Director of Bando Chemical Industries, Ltd Board Member of the Company since June 2015 Term of office: 3 years <Attendance at meetings of the Board of

Directors in FY2017> 9 out of 10 meetings

Support the rapid growth of business and advise on initiatives for the automotive market

Outside Director Takashi Shigematsu

The automotive market, which is highly expected to expand in the future as a result of advancing use of electronics, is one of Murata's key areas. I would like not only to review management policy and execution from the viewpoint of the stakeholder, but also to provide advice by drawing upon my experience and insight both in technology development at an automobile manufacturer and in management at an automotive electronics manufacturer, hoping to

contribute to success especially in the automotive market by establishing targets and priorities.

Murata is now expanding rapidly. In an expansionary phase, it is critical to work harder to maintain and improve the level of management in various aspects, including compliance, manufacturing operations, and quality management. I will keep my eye on these points from the standpoint of an Outside Director.



Board Member and Audit and Supervisory Com mittee Member of the Company since June 2016

Term of office: 2 years < Attendance at meetings of the Board of Directors in FY2017>

10 out of 10 meetings <Attendance at meetings of the Audit and Supervisory Committee in FY2017> 11 out of 11 meetings

Supervise from a wide viewpoint with emphasis on compliance

Outside Director and Audit and Supervisory Committee Member Hiroshi Ueno

With an outstanding corporate culture where the spirit of Murata Philosophy is permeated, Murata has a good working environment where the entire company works together to find solutions for any issue. I believe that the opinions and advice of Outside Directors have been accepted with serious consideration, and have contributed to the setting of priorities in management and increased speed. From an objective and neutral standpoint, I will continue to express opinions actively on any problem in relation to business content, management policy, and the approach of executives. In my view, one of the management issues associated with the recent rapid growth is

relating to personnel, which includes strengthening the hiring and development of persons who will lead the next generation, and the reallocation of personnel into new fields. I will be sure to raise such medium- and long-term issues as well.

In addition, compliance is always a top priority matter, and I will audit appropriately as an Audit and Supervisory Committee Member in cooperation with the Internal Audit Department.

I will also work for sustainable growth through supervision that utilizes my experience and insight in government administration of fields such as tax and finance, as well as compliance with the Antimonopoly Act.

Strengthen risk management in view of social circumstances and the business environment

Outside Director and Audit and Supervisory Committee Member Hyo Kambayashi

I have been engaged in affairs concerning financial auditing as a certified public accountant, and then in consulting services related to management for sustainable growth. I was involved in many domestic and foreign companies as well as government organizations, paying attention to signs or weakness in structure which can be threats to a company's survival and seeking the best balance of defense and offense.

With the emergence of new technology, the global situation is changing more rapidly than ever before, and ini-

tiatives toward environment and society, such as ESG and SDGs, are being promoted and enhanced globally. I will continue to supervise how, in such a business environment, Murata identifies opportunities and threats, and distinguishes between risks to be taken and to be avoided, as well as whether Murata has the comprehensive management capability of taking risks, and methods for evolution.

Through actively providing opinions based on my insight, I will make every effort to contribute to the creation of value



Protiviti LLC Chairman of Japan Internal Control Research

Outside Audit & Supervisory Board Member

of Sojitz Corporation

Board Member and Audit and Supervisory Committee Member of the Company since June 2018



Managing Director of Russell Reynolds Associates Japan Inc. Outside Director of SHOWA SHELL SEKIYU K.K. Board Member and Audit and Supervisory Committee Member of the Company since June 2018

Enhancing the effectiveness of corporate governance

Outside Director and Audit and Supervisory Committee Member Yuko Yasuda

I understand I was appointed Outside Director because of my experience in evaluation and development of management personnel and in corporate governance.

Although I have attended meetings of the Board of Directors only a few times since my appointment in June 2018, I have the impression that the Board of Directors is creating an open atmosphere with both Inside and Outside Directors expressing their opinions frankly. As a Board Member, Audit and Supervisory Committee Member, and Remuneration Advisory Committee Member, I would like to utilize my experience to enhance the effectiveness of corporate governance for continuous growth.

In addition, as Murata already has many talented female and foreign workers playing great roles, I would also like to contribute to the promotion of diversity.



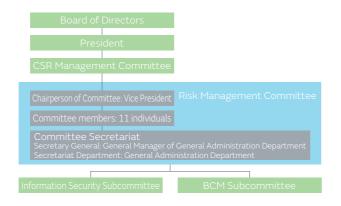
Compliance

Basic view

In order to minimize loss by emergence of risks and improve sustainable corporate value of the entire Group by managing various internal and external risks related to business activities, Murata periodically carries out initiatives to classify and evaluate risks, take preventative measures, and reduce loss in case of emergency.

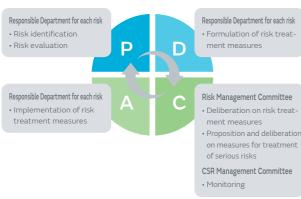
Promotion structure

Murata Manufacturing Co., Ltd. has established a Risk Management Committee as a subordinate body of the CSR Management Committee. This committee is chaired by a vice president and comprises directors from departments of General Affairs, Personnel & Industrial Relations, Corporate Communications, Intellectual Property, Environmental Affairs, Information Systems, and Legal Affairs. Together, the committee members study ways to address risks Company-wide. We have also established the Information Security Subcommittee and BCM* Subcommittee as subordinate organizations to study and take measures to address particular risks.



*BCM (Business Continuity Management)

Management activities that are operated on an ongoing basis to formulate, maintain, and renew the BCP (Business Continuity Plan), to allocate budget and resources for business continuity, to take preventative measures, and to conduct, check, and continually improve education and training for permeating initiatives.



Our initiatives

■ Strengthening of Information Security

For Murata to continue to grow, it is essential to protect information that is a Company asset, which includes technological knowhow and other confidential information. Accordingly, by establishing an organization for information security, we are working to carry out development and implementation of information security measures throughout the Company.

Besides establishing the Information Security Policy and the Information Security Management Regulations, in order to have all executives and employees understand information security and correctly handle information, we have distributed the Information Security Guidebook and promoting education, including internal training.

Furthermore, we are recording and monitoring the operations of employees on personal computers, as well as Internet communications. At the same time, for our information systems and networks, we are using third-party security diagnoses to promote measures to cope with cyberattacks.

Understanding risks

Responsible Department for each risk identifies and evaluates risks that Murata actually faces and will possibly face in the near future and formulates treatment measures twice a year, the Risk Management Committee deliberates those contents, and, if necessary, instructs additional measures. Each risk is classified in accordance with its frequency and impact so that management understands more important and urgent risks to take appropriate risk treatment measures.

■ Management of disaster risks

A major natural disaster has the potential to bring business to a stop for extended periods. Consequently, Murata Manufacturing Co., Ltd. takes various measures to ensure that business continues and that we can provide customers with a stable supply of products. We have ensured earthquake resistance and safety for buildings and production facilities, constructed backup frameworks for our communications and information systems and implemented stockpiling.

In addition, by regularly carrying out disaster drills, we will work to verify the effectiveness of our initial response as well as its continual improvement. In March 2018, Crisis Countermeasures Headquarters at the Head Office and Yokaichi Plant in Shiga Prefecture carried out a drill simulating a large earthquake to improve crisis response capabilities and find points to be improved regarding BCP.

Corporate Ethics Policy and Code of Conduct

In July 2002, Murata Manufacturing Co., Ltd. established the Corporate Ethics Policy and Code of Conduct. In April 2007, this was revised in light of CSR. Murata pledged and declared its intention to work as one in doing what needed to be done for stakeholders and society.

This revised edition of the Corporate Ethics Policy and Code of Conduct has been distributed to Murata Manufacturing Co., Ltd. and its domestic affiliates. We have

Working toward the construction of a Global Compliance System

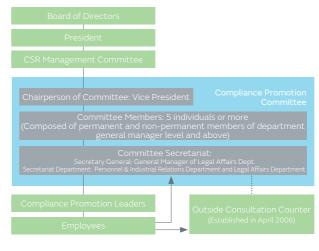
In May 2014, Murata Manufacturing Co., Ltd. established the "Basic Policy for Prevention of Cartels and Bribery." Although cartels and bribery are also prohibited in the "Corporate Ethics Policy and Code of Conduct," as a company that develops its business globally, we again disseminated Murata's basic stance on cartels and bribery.

Creating a Compliance Promotion System

Murata Manufacturing Co., Ltd. has established a Compliance Promotion Committee, a subordinate body of the CSR Management Committee. We are deliberating on, and making decisions regarding, the basic direction for revisions to the Corporate Ethics Policy and Code of Conduct, and the draft and implementation of publicity activities.

We have also appointed Compliance Promotion Leaders in each division in order to ensure that all of our employees are aware of our Corporate Ethics Policy and Code of Conduct. The Compliance Promotion Leaders take e-learning courses to gain knowledge that they pass on to other employees at compliance promotion meetings held in each division.

Compliance promotion system (As of April 1, 2018)



also created English and Chinese versions, which were distributed to all our overseas locations in September 2007, adjusted to take into account laws and ordinances and social systems of their respective locations, and which have been distributed to all our employees.

Whistle-blowing system and consultation hotlines

Murata has established an internal hotline to take whistle-blowing reports and consultations if an act within Murata that violates or could violate the Corporate Ethics Policy and Code of Conduct is discovered.

In addition, we have established an environment that makes whistle blowing easier by also setting up an outside hotline to take these kinds of whistle-blowing reports and consultations for the prevention, early detection, and prompt handling of compliance violations.

Taking whistle-blowing reports and consultations, and checking, investigating, and responding to them

When a whistle-blowing report or consultation about compliance is received by the internal or outside hotline, the Compliance Promotion Committee, the chairperson of the committee, and the secretariat of the committee lead the response. Coordinating with relevant departments as necessary, they check and investigate as far as possible all the facts and the relevant laws and regulations. On that basis, the existence or nonexistence of a compliance violation is recognized and response measures such as recommendations for correction are taken as necessary.

When reports are received under a real name, feed-back on the progress and results of checking and investigation is given appropriately while taking care to ensure the whistle blower does not unjustly face negative consequences as a result of blowing the whistle.

Process of receiving whistle-blowing reports and providing feedback $% \left(1\right) =\left(1\right) \left(1\right)$





For Murata to continue to create new value, we must keep innovating technologies constantly. Murata has built an integrated system of production from raw materials to finished products and is developing technologies into platforms so that we can independently research, develop, accumulate, and apply a fundamental technology base to product development. In addition, we proactively collaborate with outside parties with the aim of creating new markets and innovations.

Introduction of the R&D framework

Murata has built an integrated system of production from raw materials to finished products. The Company's research and development activities also range from materials development to product design technology development, production technology development, software development, and analytical technology development. We strive to improve group-wide development efficiency by developing acquired elemental technologies as platforms and rolling them out across the Group. We also actively conduct joint research with external research institutions and are acquiring new technologies in anticipation of the future.

In recent years, our focus has been particularly on the communications and automotive markets, but going forward, in addition to these markets, we will focus on the energy and healthcare/medical markets and develop technologies for

In the Components segment, we are driving the development of multilayer ceramic capacitors, noise suppression products, supercapacitors, timing devices, sensor devices, RF components, batteries, RFID, etc., with the key words of miniaturization, slimming-down, and higher heat resistance. In the Modules segment, we are driving the development of communication modules, power supply modules, multilayer resin substrates, etc., with the key words of miniaturization, higher functionalities, multifunctionalization, and lower power consumption. In the Research and Development Department, we are developing new technologies and products especially for the automotive, energy, healthcare/medical, and IoT markets, with the goal of cultivating new markets and driving innovation.

Murata's research and development framework consists of the Corporate Technology & Business Development Unit, Production Engineering Unit, Components Business Unit, Module Business Unit, and Medical Products Department. The business units and business promotion departments are mainly engaged in technological development for product types that they oversee, and the development of new products. The Corporate Technology & Business Development Unit and Production Engineering Unit mainly focus on technological development for new business creation, as well as the development and platform creation of elemental technology.

As a new research and development base for further value creation, the "Minato Mirai Innovation Center" is scheduled to be built in September 2020. At the Minato Mirai Innovation Center, we plan to reinforce basic research, planning, designing, and construction capabilities of products targeted for focus markets such as automotive, energy, and healthcare/medical, and products targeted for new markets such as IoT, in addition to existing businesses centered on the communications market.

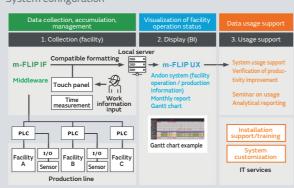
Murata's initiative: m-FLIP™ (muRata Factory Line Integration Platform)

Murata is also advancing the platform creation of production processes. m-FLIP™ is a productivity improvement platform that leverages Murata's many years of experience. We have

solutions for improvement by visualizing various data and effects such as detailed information on facility operation and a monthly report



System configuration



Platform technologies

Materials technology

"New electronic devices begin with new electronic components; new electronic components begin with new materials..." Based on this idea, we have been successfully creating materials with superior properties by always returning to materials and taking a strong stance on managing required functions and development at the source.

Front-end process technology

Front-end process technologies make it possible to produce designed functions concretely in the best possible ways. They play important roles in miniaturizing, slimming down, and enhancing the functionalities of electronic components.

Product design technology

From single-function components to modules and on to total solution proposals, the value that Murata has provided over the years continues to evolve. We develop technologies and products that can promptly respond to customer needs with an eye on the future.

Back-end process technology

Thanks to our internally designed production facilities and manufacturing ("monozukuri") expertise, we possess numerous technologies and know-how in regard to to mass producing products efficiently and stably.

Analytical technology

Efficient use of scientific analytical methods to confirm physical and electrical properties, composition, and structures of materials, together with Murata's advanced failure analysis systems, provide peace of mind to our customers.

Core competencies

Materials technology

Murata has established technologies to precisely control ceramic materials and electrode materials that determine the properties of components. By incorporating organic materials, we are also creating new value from the development of new materials.

Production technology

We have developed and manufactured our original equipment to maximize the utilization of materials technologies. Production lines and facilities that match product concepts are enhancing Murata's competitiveness.

Lamination technology

We have refined the technology of forming ceramic materials into thin sheets and stacking them on many layers. We respond to our customers' expectations with this high-level technology.

RF technology

Murata's RF technology supports the innovation of rapidly-evolving mobile devices. Modules designed with Murata's proprietary technologies contribute not only to wireless data transfer but also to wireless power supplies, supporting tomorrow's communications.

Platforms



Murata strives to develop these elemental technologies.

By fusing these elemental technologies, we will expand our product lineup and facilitate the development of new products, as well as respond to the expectations of our markets and customers.



Murata regards "employee motivation and growth (ES)," which is the driving force of innovation, as the most important value regarding human resources. The Company performs various initiatives to be a company where each employee can make good use of his or her strength, improve it, and work together based on mutual trust in daily tasks.

Treasuring people, supporting their growth

Respect for human rights

Murata upholds respect and advocacy for human rights as a prerequisite for sustainable growth of the Company and its employees. Based on Murata's Human Rights and Labor Policies, we have established a Management System on Human Rights and Labor. Each domestic business site carries out risk assessment, the drafting and implementation of goals and plans, monitoring, evaluation, and making corrections with the aim of achieving a complete PDCA cycle through management reviews. In addition, as the Company works together with many subcontractors at our manufacturing sites, we request them to endorse Murata's policies and communicate with them to promote our efforts.

Personnel recruitment

Murata recruits people who identify with Murata Philosophy and possess the following qualities that the Company looks for in its employees: think by oneself, act on one's own initiative; do work in a way that involves others and cherishes teamwork; set high goals; see things through with determination; and act quickly. We believe that each individual has varying strengths among these elements, and that leads to diversity. Furthermore, with the goal of recruiting diverse personnel, we seek personnel who are full of vitality and actively hire mid-career professionals.

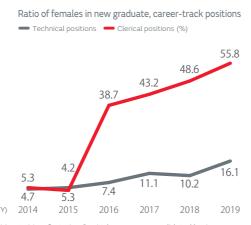
In order to support the success of women, we also have set a female ratio target for recruiting new female graduates for career-track positions (10% for technical and 40% for clerical positions) and achieved 10% and 49%, respectively, in fiscal 2018.

Human resources development

Human resources development is our highest priority. The Company has formulated a Human Resources Development Policy and implements measures to create a corporate culture for growing and developing together by raising three kinds of power: individuals' "power to grow," supervisors' and workplaces' "power to nurture," and the Company's "power to foster." As an example of raising the "power to grow," we are strengthening training to nurture the next generation of global business leaders. We conduct programs focusing on coaching and action learning based on competencies and training courses where the candidates for business leaders around the world gather, with the aim of promoting mutual cultivation among potential leaders who will be important for Murata's future. In line with the goal of rolling out these initiatives across the world, global human resources meetings are regularly held, where staff in charge of human resources at overseas and domestic offices gather, analyze current situations, and discuss issues to be solved.



Global human resources meeting



* Murata Manufacturing Co., Ltd. on a non-consolidated basis

Creating workplaces where diverse employees can keep working vibrantly

Occupational health and safety

Murata has been creating a safe and secure workplace environment where employees can work with a sense of fulfillment. The Company's frequency rate of workplace accidents has been lower than the rate for the manufacturing industry over the past ten years, but it has been on the upward trend in recent years. Our understanding is that this is due to weakness in our health and safety management system, one example of which is safety education not keeping up with the rapid increase in the number of employees as a result of mergers and acquisitions. We believe that now is the time to urgently improve the safety management system at our manufacturing sites based on a "safety first" motto and raise the danger awareness of each employee, and are carrying out daily health and safety activities. Specifically, we will implement the following: doing everything firmly based on managers leading by setting examples; fostering a safety culture where one can do ordinary things in extraordinary ways; and identifying potential risks related to facilities and workplace behaviors and conducting safety reviews. Murata also promotes safety education throughout the Company by installing facilities capable of simulating workplace accidents such as "being trapped," "being caught up," and "electric shock" and so on, and providing training to raise danger awareness among its employees.

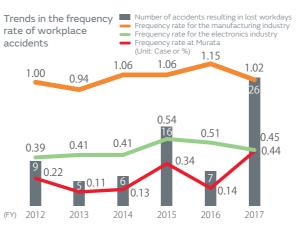
Healthy management

Based on the spirit of Murata Philosophy, Murata strives to

improve the physical and mental health of all people working for Murata. We decided in 2017 that what we would aim for under the "healthy management" concept was "employees who are healthy both physically and mentally, living and working vibrantly." In Japan, the health insurance cooperatives of our domestic affiliated companies were combined, creating a base where the Company and the health insurance cooperative jointly support the health of our employees and their families. In addition, we have reinforced an occupational health staff organization and set up a Health Promotion Committee (collaboration between the Company and the health insurance cooperative) to advance healthy management by collaborating with the health insurance cooperative.

Employment system that enables flexible work styles

With the view that employees can grow as people and acquire rich views on life and careers by playing roles not only in their work but also in their families and communities, Murata has been supporting balance between work and home and enhancing its employment system for productivity improvement. Specifically, in Japan, in addition to a flex system, the Company introduced a super-flex system without mandatory hours, paid vacation that can be taken on an hourly basis, and a leave system for accompanying a spouse's overseas relocation. In day-to-day labor management, workers and managers implement improvement measures in workplaces with long working hours.



* Murata Manufacturing Co., Ltd. and domestic subsidiaries



Fukui Murata Manufacturing Co., Ltd. MS (Murata Safety) Center Simulation based training for danger awareness



Creating a culture of leveraging diverse individual strengths and working together

Diversity and inclusion

Murata regards diversity and inclusion as accepting and leveraging not only visible diversity such as gender, age and race, but also invisible qualities and strengths such as thoughts, knowledge, experiences, and viewpoints. Under the slogan "Innovator in Electronics" shared by all employees, we facilitate diversity and inclusion with the aim of realizing more innovations by diverse human resources. Specifically, under the three axes of "Permeation activities," "Fostering understanding among managers," and "Implementing measures according to attributes," we are engaged in the following initiatives.

Permeation activities

Training organized by the Company executives on the theme of diversity and inclusion
Establishment of M-DIP (Murata Diversity & Inclusion Plaza)*

- Fostering understanding among managers
 Internal lectures
- Implementing measures according to attributes
- Execution of action plans for the Act on Promotion of Women's Participation and Advancement in the Workplace
- Career training / counseling for senior employees

Instilling the Murata Philosophy that connects diverse individuals

Murata believes that it is important not only to accept and utilize the diverse strengths and qualities of each employee but also to resonate and connect them to Murata's innovations. To that end, it is necessary for all employees to share the values safeguarded by Murata. Murata is carrying out measures to deepen the understanding of Murata Philosophy across the world, including training organized by Company executives where the executives themselves become lecturers to teach the Murata Philosophy, providing materials for discussion on Murata Philosophy at workplaces, and holding workshops at domestic and overseas subsidiaries. In addition, when we welcome new employees who have joined the Company as a result of recruitment or mergers and acquisitions, we begin by having them identify with Murata Philosophy as a member of Murata. In this way, we are committed to creating a foundation for utilizing the various backgrounds of each person for the implementation of the Murata Philosophy.

* M-DIP is a committee established at Murata Manufacturing Co., Ltd. in 2016 with the aim of making full use of diverse knowledge, capabilities, and viewpoints of our employees. Members who are internally recruited are carrying out promotion activities such as creating a website and holding lectures and dialogue meetings on diversity and inclusion



In order to keep Murata an indispensable part of society, we strive to strengthen our partnerships by valuing the connections with not only our customers but also our suppliers and local communities. We are building solid trusting relationships by communicating Murata's approach to our entire supply chain, and are involved in community outreach activities so that our local communities will be proud to have Murata's presence.

Promotion of CSR procurement with emphasis on partnerships with suppliers

"...being trustworthy and, together with all our stakeholders, thankful for the increase in prosperity."

This is a passage from the Murata Philosophy.

The ideas on which we place the utmost importance in doing business with our suppliers are summarized here.

With "equitability, fairness, and transparency" as the philosophy of our procurement activities, Murata has been cultivating partnerships aimed at coexistence and mutual prosperity with our suppliers, based on the Purchasing Policies. These ideas will not change in the future, and we will fortify them further in order to achieve mutual prosperity with our stakeholders.

We are required to strengthen our efforts to reduce CSR related risks, in particular anti-corruption and an approach for conflict minerals, and we are mainly working on the following three aspects of CSR procurement.

- We request our suppliers to comply with the Murata CSR Charter which is based on the Murata Philosophy, and the summarized Our Expectations of Suppliers, which is based on the Murata CSR Charter.
- 2. At the time of opening an account, we request our suppliers to sign a CSR Agreement and agree to implement activities that are compliant with the Code of Conduct of the Responsible Business Alliance (RBA).

3. From 2017, we began using the Checklist for CSR Compliance Status, which enables our suppliers themselves to self-assess their CSR compliance status, visualize problems, and share the results with Murata. By having discussions on these problems and corrective measures between the two parties, we aim to make more efficient and fundamental solutions

In order to implement these measures effectively, Murata believes that it is important not to impose CSR compliance activities unilaterally but to cooperate with our suppliers based on the partnerships we have cultivated so far.

In recent years, we have been expected to expand the scope of these CSR activities not only to companies with whom we have relationships but also across the entire supply chain. Based on the spirit of the Murata Philosophy, Murata will continue to build long-term trust and strong partnerships by aiming for coexistence and mutual prosperity with our suppliers, while further expanding and enhancing our CSR procurement and realizing the supply chain that assures our stakeholders of safety.

Purchasing Policy: https://www.murata.com/en-global/about/procurement/policy

Our Expectations of Suppliers: https://www.murata.com/ en-global/about/procurement/expectations

Realizing a Sustainable Society

Employees

Customers

Customers

Customers

Realizing a Sustainable Society

CSR Charter based on Murata Philosophy

Shareholders/
Investors

Society/
Community

Environment

Murata

Realizing a Sustainable Society

CSR Charter based on Murata Philosophy

Permeation
of
CSR through
supply chain

Promoting responsible mineral procurement

Serious human rights violations have become a social problem in mineral procurement, and interests in responsible mineral procurement are rising.

Murata regards this as part of our corporate social responsibility (CSR) efforts, and conducts surveys and provides information in compliance with the industry standards based on our responsive policies (https://www. murata.com/en-global/about/csr/mineral). Furthermore, as an internal framework, the CSR Management Committee, chaired by a Representative Director, shares information with top management on activities, progress, and any issues regarding responsible mineral procurement, and makes any decisions.

In response to requests from our customers for our supply chain information, we provide information using the CMRT (Conflict Minerals Reporting Template) issued by the RMI (Responsible Minerals Initiative). We also regularly conduct surveys on our suppliers to keep the information updated. We continue to carry out our efforts to reduce risk and make our supply chain transparent by working together with our suppliers for improvement. This entails reviewing reported information in line with the internal standards prescribed based on the OECD Due Diligence Guidance and carrying out corrective measures, and so

Murata Manufacturing Co., Ltd. is also a member company of the Responsible Minerals Trade Working Group at Japan Electronics and Information Technology Industries Association (JEITA), and of the Responsible Minerals Initiative (RMI). We are proactively working on issues that are difficult to solve as an individual company, such as creating industry-wide frameworks.

We also participate in the JEITA-sponsored Responsible Minerals Sourcing Inquiry Briefings as a lecturer.

Due to the EU's Conflict Minerals Regulation that will become effective in 2021 and growing awareness of human rights issues, the scope of responsible mineral procurement is being further extended to more regions, risks, and minerals. Murata is currently preparing our

response to these developments in cooperation with the industry peers. We are planning to provide customers with supply chain information based on industry standards regarding new areas such as Annex II of the OECD Due Diligence Guidance, Conflict Affected and High-Risk Areas (CAHRAs), and cobalt. With regard to battery products, we have already initiated efforts for a transparent supply chain that includes cobalt.

Despite the increasing difficulty of responding to the expansion and changes in various requirements, Murata will continue to actively address these issues. It is also our intention to ensure the transparency of our supply chain and to soon realize CSR procurement including responsible mineral procurement by closely cooperating with our customers, suppliers, and the industry, etc., more

We believe that advancing and realizing these initiatives is important not only to assure our stakeholders of safety and security but also to deliver Murata's sustainable

Promoting responsible mineral procurement

- Working within the framework of CSR procurement activities based on the Murata Manufacturing CSR Charter.
- Building a management framework in accordance with the OECD Due Diligence Guidance.
- 3 Using the above mechanisms to promote responsible procurement of minerals used by Murata, such as by preventing the financing of armed groups for conflict minerals (gold, tin, tantalum, tungsten) through continued efforts to use low-risk components and materials. Also. refusing to conduct procurement from companies that are clearly involved in conflicts or human rights violations.
- 4 Conducting sensible and efficient procurement in a sincere manner, based on industry standards, and in close collaboration with industry organizations.
- Sharing information regarding minerals that are obtained through the supply chain with partner companies as quickly as possible.

Activities to contribute to society and local communities

Basic policies for activities to contribute to society and local communities

Murata desires to be a company whose presence in local communities is considered the pride and joy of those communities. Making effective use of its resources (employees, expertise, facilities and funds), Murata constantly makes contributions to society and local communities.

| We will pay attention to social challenges and practice corporate philanthropy taking advantage of Murata's characteristics. |
|---|

a source of pride in the operate, we will fulfill our according to the regional

To make our presence We will value employees ideas and participation encourage and support individual employees to actively seek connections with society and local

Activities to assist with nurturing children who will forge the future

As a manufacturing company, in order to communicate the job details of engineers who are the backbone of manufacturing and what is interesting about engineering work, Murata offers science education and visiting classes for elementary and junior high school

Murata's domestic and overseas affiliated companies lecture on how the mechanisms of our original bicycleriding robot, MURATA BOY, work, and what it was like during the development stage, deliver electronics workshops, and hold environmental classes to raise interest in environmental conservation on an ongoing basis. During fiscal 2017, we held 123 science education and visiting classes in total. We will continue our activities with a desire to be a company that gives

dreams and hopes to children who will be responsible for the future.

Greening activities harmonized with local cultures and

By formulating its Green Basic Policy and based on the view that it is a corporate social responsibility to create, maintain, and nurture cultural atmospheres in local communities, each of our business sites is engaged in greening activities that harmonize with local cultures and nature. We open our business sites to local communities for their enjoyment every season. During fiscal 2017, we opened a total of 83 business sites to the public.

We are also working on ecosystem conservation through activities such as "Murata Forest," where our employees conduct forest conservation activities with support from local residents.

Academic support activities

The Murata Science Foundation was established in 1985 to contribute to the advancement of science and technology through academic promotion. The Foundation gives grants to research contributing to the improvement and development of science and technology and the solutions to various problems in the humanities and social sciences, and encourages international exchange among researchers.

During fiscal 2017, the Foundation provided a total of 290 million yen in grants, comprising 141 research project grants, 38 study group grants, and 99 cases of overseas dispatch assistance. In the 32 years since the establishment of the Foundation, the cumulative grants amount to 3.2 billion yen.

Topic Inspiring future innovators

An important part of Murata's mission is to invest in and inspire the next generations of innovators, in order to sustain a continuous improvement in our shared world. Raising global awareness for the importance of studies in science, technology, engineering and mathematics (STEM) is one of the initiatives Murata has undertaken towards fostering the development of our future innovators. In 2017, Murata teamed with Walt Disney Parks Creative Entertainment and the non-profit organization, Science from Scientists to develop The SpectacuLAB, an interactive science and technolEpcot® at Walt Disney World® Res

ogy show that opened at Innoventions[®] Pavilion in Epcot[®] at Walt Disney World Resort.[®]



To pass onto our children a bountiful mother Earth, and to ensure sustainable coexistence and shared prosperity for Murata and other citizens of our planet, we are committed to environmental protection activities centered on an Environmental Committee and Global Warming Prevention Committee covering all environment-related departments. In addition to reducing the environmental impact of our business activities, we have positioned environmental protection as one of our priority risk treatment measures in the process of long-term value creation.

Climate change policies

To date, Murata has established in-house investment standards for energy facilities, and is developing measures to combat climate change through proactive investment in energy-saving systems.

Murata is also subject to external evaluation. We were awarded an A- rating by CDP in recognition of our third-party accreditation for greenhouse gas emission volumes and our proactive disclosure initiatives.

However, greenhouse gas emission volumes for fiscal 2017 has been increasing rapidly due to increased production amid the recent expansion of operational scale, as well as engagement in large-scale mergers and acquisitions and development of new businesses. To halt and roll back the upward momentum in greenhouse gas emissions, we have set up a Company-wide Global Warming Prevention Committee chaired by a Board Member, and have established long-term visions for the years to 2030 and to 2050 based on the Science Based Targets (SBT) approach.

Going beyond conventional energy-saving measures centered on facility investment, we have also set up a new energy management system that combines proprietary sensor and IoT technologies, and have begun to optimize energy use within production processes.

We will also participate in the Japan Climate Leaders' Partnership, a grouping that ambitiously addresses climate change issues in Japan. Drawing on external expertise, we will launch our own in-house activities and consider the establishment of businesses that contribute to global climate change policymaking through collaborations with enterprises participating in this group. These initiatives are discussed in greater detail on our website.

Trends of total CO₂ emissions and the rate of Total CO₂ emissions improvement in basic units Rate of improvement in -11.24 (1,000 t-CO₂/year) 1,400 1,158 1,200 1,024 1,058 1,000 850 769 800 600 400 2013 2017 2020 (Target 2014 2016

Management of chemical substances

Murata is committed to supplying products with minimal impact on the global environment, to usher in a sustainable social system.

In addition to complying with legal and regulatory regimes such as the RoHS Directive and the REACH regulations, we have established in-house standards that incorporate global trends and customer requirements regarding environmentally harmful substances. Through the management system profiled below, we are taking aggressive measures to reduce or prevent use of environmentally harmful substances in our products.

Murata is also taking preemptive measures ahead of amendments of legislation regarding environmentally harmful substances.

Under the current RoHS Directive, use of six kinds of chemical substance in electronics and electrical equipment sold within the European Union is subject to restrictions. In the amended RoHS Directive implemented July 22, 2019, use of another four types of specific phthalic acid esters has additionally been restricted.

Ahead of the implementation of the amended RoHS Directive, Murata has banned inclusion of specified phthalic esters in newly developed products since July 2017. We are also moving ahead with preparation of alternative products for our established lineups that include specified phthalic esters.

Through such measures, reducing use of environmentally harmful substances is another way in which Murata puts the safety of society, local communities and customers first.

Management of environmentally harmful substances at Murata

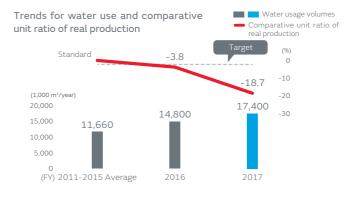


Water resource management

Murata encourages efficient use of water resources in its business activities. Based on the 6th Environmental Action Plan, we are now reducing water usage volumes and putting in place measures for water risk affecting business activities.

Progress in the 6th Environmental Action Plan

A 19% improvement against benchmarks in the previous fiscal year enabled us to meet our targets. At Wuxi Murata Electronics Co., Ltd., we reduced water usage volumes by 100,000 tons over the year by processing wastewater to levels where it could be reused in production processes.



Responding to water risk

Using disclosure materials made available by public and other authorities such as WRI Aqueduct*1 and WBCSD Global Water Tool*2, we are evaluating water risk (risk of drought and flooding) after establishing in-house standards for appraisal. Drought risk for each business site is evaluated using three grades (high, medium, and low). Looking at water usage volumes by appraisal grade, we concluded that 98% of sites were at locations where overall drought risk was low or medium. There were no business sites at a high risk of flooding, assessed in terms of frequency of flood occurrence and extent of impact.

*1 Water risk evaluation tool developed by World Resources Institute (WRI)

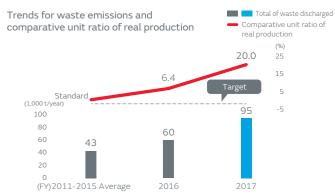
 $^{*2}\,\hbox{Water}\,\hbox{risk evaluation tool developed by World Business Council for Sustainable Development (WBCSD)}$

Waste Management

Murata is engaged in waste management following basic policies of compliance, curbing generation of waste products, and zero emissions. Based on the 6th Environmental Action Plan, we are currently taking measures to reduce volumes of waste generated and put in place measures for natural disasters such as heavy snow and earthquakes.

Progress in the 6th Environmental Action Plan

Despite measures taken to reduce waste including the rationalization of usage volumes of solvents, we fell 20% short of our target. The reason for this was a dramatic increase in production volumes for lines with higher waste per basic unit values, in line with business expansion. At the moment, we are considering introduction of wastewater processing facilities for in-house treatment of the 15% of total waste that is fluid, and plan to complete these facilities during fiscal 2019.



Disaster measures

We have commissioned a waste disposal firm to handle waste generated through production activities and also to carry out recycling. In the event of disaster damage arising at this subcontractor despite all precautions, we would have to suspend production activities as we would no longer be able to get rid of waste. To avoid this risk, we are securing additional processing routes so that production activities would not be affected.

Opinion from a third party

This is the first integrated report published by Murata. I highly commend this leading company in Japan for embarking on this initiative. The organic fusion of sustainability and economic activities is the theme of the report. Looking ahead, I hope that Murata can remain constant in its commitment to achieving this goals.

The key to combining sustainability and economic activities is the business philosophy. Murata Philosophy is also stated at the beginning of the integrated report, and the content of the report embodies its spirit. Particularly important are values centered on customer and employee satisfaction, as emphasized in the Message from the President. A commendable point is the maintenance of overall consistency by making the stated commitment to ensuring corporate growth by increasing the satisfaction of customers and employees a core precept of the integrated report as well.

The most difficult aspect of compiling an integrated report is deciding what the values at issue actually are. Because there is no point to an integrated report if such values are subsumed in financial values. What is important is "financial values plus α ." In the case of Murata, I believe that this α -factor is the linkage of customer and employee satisfaction. Looking ahead, I think the question will be how to evaluate such new values using Key Performance Indicators.

I also highly commend the fact that governance matters are disclosed in a very detailed way. In particular, it is highly significant for the Company as a corporate citizen that messages from Outside Directors are included. Looking ahead, I think this will be a very meaningful report if it follows up how these opinions reflected in management. Society is watching how Board Members address sustainability issues.

This is the first year of the integrated report. There will be issues that remain to be addressed in more detail in future. For example, responses to Sustainable Development Goals (SDGs) likewise cited in the Message from the President are becoming an important issue for Japanese companies generally. Additionally, risk management measures are thoroughly detailed, but I think more information should be given on how Murata balances risk and opportunity. It could also consider enriching the content by including more material on flexible working practices, a strength of Murata. I look forward to further development of the report.



Professor

Katsuhiko Kokubu

Graduate School of Business

Administration,

Kobe University

Analysis of operating results and financial situation

Review of fiscal 2017

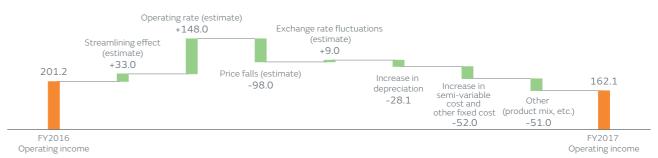
In fiscal 2017, while some products for the smartphone market suffered from lower shipments in China, the increasing functional sophistication of terminals led to higher added value for components and steady growth in the number of components used per phone, especially in high-end models. Furthermore, in the automotive electronics market, there was a sharp increase in the amount of electrical equipment installed in vehicles due to improvements in vehicle environmental performance and safety, generating significantly higher demand for electronic components.

Under such circumstances, by focusing on promising markets, Murata increased net sales by 20.8% year-on-year to 1,371.8 billion yen in fiscal 2017. This was primarily due to the consolidation of the lithium-ion battery business, whose acquisition process from Sony

Corporation was completed on September 1, 2017, as well as the effect of the exchange rate (the yen's depreciation of 2.44 yen against the dollar compared with the previous fiscal year).

An increase in the production of capacitors, etc., for which demand is expanding in various applications, and high operation capacity boosted profits. However, this was offset by negative factors such as the decline in product prices and the increases in depreciation and investment expenses, mainly in buildings and production facilities related to the expansion of production of new products. As a result, operating income was 162.1 billion yen, down 19.4%, income before income taxes was 167.8 billion yen, down 16.3%, and net income attributable to the Murata Corporation was 146.1 billion yen, down 6.4% from the previous fiscal year.

Actual increase/decrease in operating income (Billion yen)



Sales by product (Billion ven. %)

| | FY2016 results | FY2017 results | Increase/ decrease | Reasons for increase/decrease |
|-------------------------------------|-------------------|-------------------|-----------------------|--|
| Capacitors | 369.5 | 449.8 | +80.3 (+21.7%) | Compact large-capacity chip multilayer ceramic capacitors for new smartphone models grew substantially. Products for automotive electronics where vehicle electrification is progressing, and those for PCs were also strong, generating a significant sales increase. |
| Piezoelectric Components | 170.0 | 152.0 | -18.0 (-10.6%) | SAW filters suffered from sluggish sales due to lower production of smartphones in China. |
| Other Components | 222.3 | 322.3 | +100.1 (+45.0%) | Substantial sales growth was achieved as demand for coils for automotive electronics increased, and sales in the lithium-ion battery business acquired in September 2017 were added. |
| Communication Modules | 325.7 | 395.0 | +69.3 (+21.3%) | Short-range wireless communication modules and MetroCirc™ for high-end smartphones substantially grew and increased sales. |
| Power Supplies and Other Modules | 45.1 | 48.9 | +3.8 (+8.3%) | Sales increased as products for industrial electrical equipment posted solid growth. |
| Total Product Net Sales | 1,132.6 | 1,368.0 | +235.4 (+20.8%) | |

 45

Consolidated Balance Sheets

(Millions of yen)

| | End of FY2016 March 31, 2017 | End of FY2017 March 31, 2018 |
|---|---------------------------------|---------------------------------|
| Assets | | |
| Current assets | 871,431 | 810,260 |
| Cash | 170,929 | 168,902 |
| Short-term investments | 170,929 | 30,747 |
| Marketable securities | 53,043 | 20,790 |
| Trade notes receivable | 271 | 2,895 |
| Trade accounts receivable | 209,596 | 256,140 |
| Allowance for doubtful notes and accounts | (905) | (1,159) |
| Inventories | 211,447 | 290,257 |
| Deferred income taxes | 25,890 | 290,237 |
| Prepaid expenses and other | 23,690 | 41,688 |
| Property, plant and equipment | 507,969 | 705,229 |
| Land | | |
| | 50,761 | 64,772 |
| Buildings | 394,239 | 467,427 |
| Machinery and equipment | 950,280 | 1,104,592 |
| Construction in progress | 40,035 | 97,090 |
| Accumulated depreciation | (927,346) | (1,028,652) |
| Investments and other assets | 255,599 | 281,524 |
| Investments | 103,468 | 87,288 |
| Intangible assets | 48,883 | 54,347 |
| Goodwill | 62,102 | 76,914 |
| Deferred income taxes | 5,259 | 36,346 |
| Other | 35,887 | 26,629 |
| Total assets | 1,634,999 | 1,797,013 |
| Liabilities | | |
| Current liabilities | 208,734 | 261,812 |
| Short-term borrowings | 46,118 | 13,500 |
| Trade accounts payable | 57,918 | 94,074 |
| Accrued payroll and bonuses | 34,075 | 38,041 |
| Income taxes payable | 7,240 | 24,968 |
| Accrued expenses and other | 63,383 | 91,229 |
| Long-term liabilities | 70,931 | 77,985 |
| Long-term debt | 545 | 742 |
| Termination and retirement benefits | 59,324 | 67,843 |
| Deferred income taxes | 9,677 | 7,675 |
| Other | 1,385 | 1,725 |
| Total liabilities | 279,665 | 339,797 |
| Equity | | |
| Murata Corporation's Shareholders' equity | 1,354,819 | 1,456,600 |
| Common stock | 69,377 | 69,444 |
| Capital surplus | 114,290 | 120,596 |
| Retained earnings | 1,241,180 | 1,336,208 |
| Accumulated other comprehensive loss | (14,219) | (16,052) |
| Unrealized gains on securities | 6,127 | 7,576 |
| Pension liability adjustments | (15,652) | (16,995) |
| Foreign currency translation adjustments | (4,694) | (6,633) |
| Treasury stock, at cost | (55,809) | ` ´ |
| Noncontrolling interests | (55,609) | (53,596) 616 |
| | | |
| Total liabilities and equity | 1,355,334 | 1,457,216 |
| Total liabilities and equity | 1,634,999 | 1,797,013 |

Consolidated Statements of Income

(Millions of yen)

| | FY2016 April 1, 2016 - March 31, 2017 | FY2017 April 1, 2017 - March 31, 2018 |
|--|--|--|
| Net sales | 1,135,524 | 1,371,842 |
| Cost of sales | 703,129 | 926,929 |
| Selling, general and administrative | 149,371 | 187,602 |
| Research and development | 81,809 | 94,056 |
| Operating income | 201,215 | 163,255 |
| Interest and dividend income | 2,449 | 2,854 |
| Interest expense | (272) | (581) |
| Foreign currency exchange loss | (4,815) | (7,299) |
| Gain on bargain purchase | _ | 6,442 |
| Other - net | 1,841 | 3,130 |
| Income before income taxes | 200,418 | 167,801 |
| Income taxes | 44,342 | 21,749 |
| <current income="" tax=""></current> | <39,813> | <48,538> |
| <deferred income="" tax=""></deferred> | <4,529> | <(26,789)> |
| Net income | 156,076 | 146,052 |
| Less: Net income (loss) attributable to noncontrolling interests | 16 | (34) |
| Net income attributable to Murata Corporation | 156,060 | 146,086 |

Consolidated Statements of Comprehensive Income

(Millions of yen)

| | FY2016 April 1, 2016 - March 31, 2017 | FY2017 April 1, 2017 - March 31, 2018 |
|---|--|--|
| Net income | 156,076 | 146,052 |
| Other comprehensive income (loss), net of tax | | |
| Unrealized gains on securities | 3,141 | 1,449 |
| Pension liability adjustments | 8,822 | (1,343) |
| Foreign currency translation adjustments | (9,895) | (1,925) |
| Other comprehensive income (loss) | 2,068 | (1,819) |
| Comprehensive income | 158,144 | 144,233 |
| Less: Comprehensive loss attributable to noncontrolling interests | (2) | (20) |
| Comprehensive income attributable to Murata Corporation | 158,146 | 144,253 |

Consolidated Statements of Shareholders' Equity

(Unit: shares, millions of yen)

| | Number of | | | | | | 2 . II: | | |
|--|-------------------------|-----------------|-----------------|----------------------|--|----------------|-----------------------|--------------------------|--------------|
| | common shares issued | Common stock | Capital surplus | Retained earnings | Accumulated other comprehensive loss | Treasury stock | Controlling interests | Noncontrolling interests | Total equity |
| Balance at March 31, 2016 | 225,263,592 | 69,377 | 103,865 | 1,131,809 | (15,532) | (60,360) | 1,229,159 | 14,820 | 1,243,979 |
| Purchases of treasury stock at cost | (| | | | | (88) | (88) | | (88) |
| Disposal of treasury stock | | | 3 | | | 2 | 5 | | 5 |
| Net income | | | | 156,060 | | | 156,060 | 16 | 156,076 |
| Cash dividends | | | | (46,689) | | | (46,689) | | (46,689) |
| Other comprehensive income, net of tax | | | | | 2,086 | | 2,086 | (18) | 2,068 |
| Equity transaction with noncontrolling interests and other | | | 10,422 | | (773) | 4,637 | 14,286 | (14,303) | (17) |
| Balance at March 31, 2017 | 225,263,592 | 69,377 | 114,290 | 1,241,180 | (14,219) | (55,809) | 1,354,819 | 515 | 1,355,334 |
| Purchases of treasury stock at cost | (| | | | | (53) | (53) | | (53) |
| Disposal of treasury stock | | | 6,272 | | | 2,266 | 8,538 | | 8,538 |
| Net income | | | | 146,086 | | | 146,086 | (34) | 146,052 |
| Cash dividends | | | | (51,058) | | | (51,058) | | (51,058) |
| Other comprehensive loss, net of tax | | | | | (1,833) | | (1,833) | 14 | (1,819) |
| Restricted stock compensation | 7,835 | 67 | 34 | | | | 101 | | 101 |
| Equity transaction with noncontrolling interests and other | | | | | | | | 121 | 121 |
| Balance at March 31, 2018 | 225,271,427 | 69,444 | 120,596 | 1,336,208 | (16,052) | (53,596) | 1,456,600 | 616 | 1,457,216 |

Consolidated Statements of Cash Flows

(Millions of yen)

| Consolidated Statements of Cash Flows | | (Millions of yen) | | |
|--|--|--|--|--|
| | FY2016 April 1, 2016 - March 31, 2017 | FY2017 April 1, 2017 - March 31, 2018 | | |
| Operating activities | | | | |
| Net income | 156,076 | 146,052 | | |
| Adjustments to reconcile net income to net cash provided by operating activities | | | | |
| Depreciation and amortization | 113,523 | 141,625 | | |
| Losses on sales and disposals of property, plant and equipment | 1,867 | 1,620 | | |
| Provision for termination and retirement benefits, less payments | (1,040) | (771) | | |
| Deferred income taxes | 4,529 | (26,789) | | |
| Gain on bargain purchase | _ | (6,442) | | |
| Changes in assets and liabilities | | | | |
| Increase in trade notes and accounts receivable | (14,317) | (30,135) | | |
| (Increase) decrease in inventories | 5,032 | (47,268) | | |
| Increase in prepaid expenses and other | (4,916) | (11,970) | | |
| Increase in trade notes and accounts payable | 650 | 24,873 | | |
| Increase (decrease) in accrued payroll and bonuses | (2,394) | 970 | | |
| Increase (decrease) in income taxes payable | (22,678) | 17,784 | | |
| Increase in accrued expenses and other | 7,586 | 10,433 | | |
| Other - net | 2 | 5,267 | | |
| Net cash provided by operating activities | 243,920 | 225,249 | | |
| Investing activities | | | | |
| Capital expenditures | (158,579) | (306,608) | | |
| Payment for purchases of marketable securities, investments and other | (58,967) | (13,016) | | |
| Maturities and sales of marketable securities, investments and other | 45,192 | 57,131 | | |
| (Increase) decrease in long-term deposits | (22,591) | 1,081 | | |
| Decrease in short-term investments | 5,982 | 98,424 | | |
| Acquisition of businesses, net of cash acquired | (14,725) | (33,648) | | |
| Other - net | 991 | 2,471 | | |
| Net cash used in investing activities | (202,697) | (194,165) | | |
| Financing activities | | | | |
| Net increase (decrease) in short-term borrowings | 39,673 | (32,618) | | |
| Proceeds from long-term debt | _ | 403 | | |
| Repayment of long-term debt | (4,662) | (353) | | |
| Dividends paid | (46,689) | (51,058) | | |
| Other - net | (51) | 41 | | |
| Net cash used in financing activities | (11,729) | (83,585) | | |
| Effect of exchange rate changes on cash and cash equivalents | (2,880) | 1,227 | | |
| Net increase (decrease) in cash and cash equivalents | 26,614 | (51,274) | | |
| Cash and cash equivalents at beginning of year | 212,570 | 239,184 | | |
| Cash and cash equivalents at end of year | 239,184 | 187,910 | | |
| Additional cash and cash equivalents information | | | | |
| Cash | 170,929 | 168,902 | | |
| Short-term investments | 173,401 | 30,747 | | |
| Short-term investments with the original maturities over 3 months | (105,146) | (11,739) | | |
| Cash and cash equivalents at end of year | 239,184 | 187,910 | | |

Company overview

Trade name Murata Manufacturing Co., Ltd.

Date of December 23, 1950 (established in October

incorporation 1944)

Common stock 69,444 million yen

69

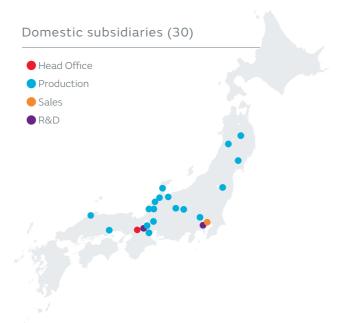
Head 10-1, Higashikotari 1-chome, Locations Office Nagaokakyo-shi, Kyoto 617-8555

Tel: +81-75-951-9111

Branch Tokyo Branch, Shibuya-ku, Tokyo

Domestic subsidiaries

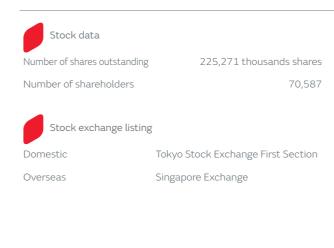
Overseas subsidiaries

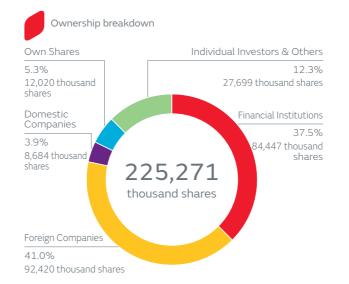


Overseas subsidiaries (The Americas: 14, Europe: 12, Asia: 43)



Stock information







(Note) The Company holds 12,020 thousand shares of its own stock. As these shares do not confer voting rights, they are excluded from the above table.

One year at Murata

April 2017

May

June





July September August

October

November

January 2018

February

March





Murata Manufacturing Co., Ltd.

10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto 617-8555 TEL: +81-75-951-9111