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ANNUAL REPORT 2018

For the year ended March 31, 2018

SANKEN ELECTRIC CO.,LTD.

Profile

Sanken Electric Co., Ltd. began operations as a spin off from a research institute in 1946 conducting R&D activities in semiconductors, which was then a new field of electronics. Technology gained through these activities was used to manufacture a growing line of power supply products.

Having grown in tandem with the electronics industry since then, today Sanken Electric has forged a commanding presence as a manufacturer in the field of power electronics. This reputation enables the Company to offer customers high-quality solutions in power supplies and peripheral business domains that meet their diverse needs. Along with a focus on growth in its core business of semiconductor devices, Sanken Electric is determined to enhance the competitiveness of products for the fast-growing fields of automotive electronics and energy-saving consumer products. Underpinned by an extensive track record and expertise gained over the years, Sanken Electric will strive to supply products that are more original and advanced than ever before, and consistently rise to meet any challenge by remaining a consummate innovator in power electronics.

Contents

Forward-Looking Statements

This annual Report contains forecasts and other forward-looking statements concerning the Sanken Group's future plans and results. Such statements reflect assumptions and beliefs based on information available to the Group at the time of this report's writing. The Group's actual performance may be affected by numerous factors, including new competition in the electronics industry, risks and uncertainties related to market demand and conditions in global stock and foreign exchange markets. Readers are therefore reminded that actual results may differ from forward-looking statements in this report.

Philosophy

Power Electronics
for Your Innovat!on

Slogan Meaning

The spirit of our expectations for the medium-term management plan, as we start the Medium-Term Management Plan 2018 (Medium-term Management Plan 18), is expressed by our slogan, Power Electronics for Innovation. The desire of Sanken Electric to be a corporation that contributes to our customers' innovations with power electronics, to the innovations of each and every employee and to the innovations of our society, is instilled in this slogan.

Corporate Philosophy

Our mission is to provide an optimum solution in our core business of semiconductors, as well as power electronics and other peripheral areas, to contribute to the advancement of industry, the economy and culture all over the world.

We will strive to innovate our technological strengths and creative power, while pursuing reliability in the quality we offer.
We also aim to share value with our customers and implement our business operations on a global scale, leveraging our proprietary technologies.

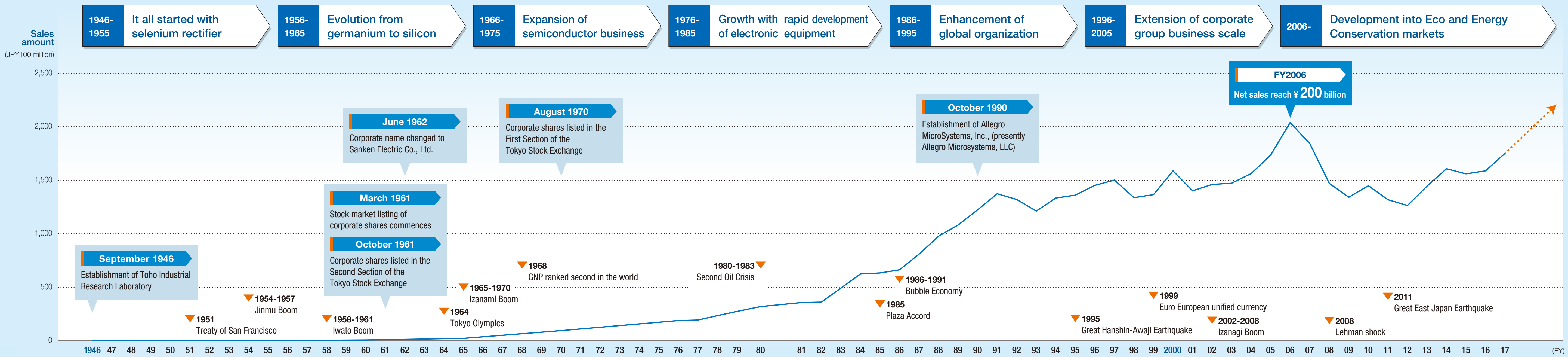
We treat each and every employee fairly and with respect.
Employees strive to become individuals who are trusted and grow as business individuals.

We will carry out our duties based on high ethical values, as business people who value technology and creativity, while interacting with our customers and trading partners, impartially and virtuously.

We will maximize the value of the company on behalf of our shareholders, while fulfilling our social responsibilities and striving for harmony with the environment.

History of Sanken Group

Since its founding in 1946, Sanken Electric has continued with a series of research and development projects and contributed to the advancement of industry, the economy and culture all over the world.



1946 Establishment of Toho Sanken Electric Co., Ltd., in Shiki Town (presently Shiki City) of Saitama Prefecture.

1952 Relocation of Headquarters and Plant to Owada Town (presently Shinza City) in Saitama Prefecture.

1954 Opening of Tokyo Office.

1961 Corporate shares listed in the Second Section of the Tokyo Stock Exchange.

1962 Corporate name changed to Sanken Electric Co., Ltd.

1963 Opening of Osaka Branch.
Completion of construction for Kawagoe Plant.

1964 Establishment of Shiga Sanken Industry Co., Ltd., (four companies subsequently established in Ishikawa Prefecture).

1970 Establishment of Kashima Sanken Co., Ltd.
Corporate shares listed in the First Section of the Tokyo Stock Exchange.

1973 Opening of Kyushu Sales Office.
Establishment of Korea Sanken Co., Ltd.

1974 Establishment of Sanken Densetsu Co., Ltd.

1977 Opening of Hiroshima Sales Office.

1978 Merger of five affiliated companies in Ishikawa Prefecture to establish Ishikawa Sanken Co., Ltd.

1979 Opening of Sendai Sales Office.

1981 Establishment of Yamagata Sanken Co., Ltd.

1986 Opening of Nagoya Sales Office.

1988 Establishment of Fukushima Sanken Co., Ltd.
Opening of Kanazawa Sales Office.
Establishment of Sanken Electric Hong Kong Co., Ltd.

1989 Opening of Sapporo Sales Office.
Establishment of Gooding Sanken Limited in the UK.

1990 Establishment of Sanken Electric Singapore Ptd., Ltd., In Singapore.
Establishment of Allegro MicroSystems, Inc.,

1994 Investment in Shimoda Electric Co., Ltd., which became our subsidiary.

1997 Establishment of P.T. Sanken Indonesia.

2000 Incorporation of Seoul Branch to form Sanken Korea Co., Ltd.

2001 Establishment of Taiwan Sanken Electric Co., Ltd.

2003 Establishment of Sanken Electric (Shanghai) Co., Ltd.
Investment in Sanken L.D. Electric (Jiangyin) Co., Ltd., which became our subsidiary.

2004 Opened Taiwan Technology Center of Taiwan Sanken Electric Co., Ltd.

2005 Establishment of Polar Semiconductor, Inc. (presently Polar Semiconductor LLC), in the United States.
Established Sanken Optoproducts Co., Ltd., in Ishikawa Prefecture.

2009 Established Sanken Electric (Shanghai) Co., Ltd.
Investment in Dalian Sanken Electric Co., Ltd., which became our subsidiary.
Investment in Sanken Electric (Malaysia) Sdn. Bhd., which became our subsidiary.

2011 Establishment of Allegro (Shanghai) Micro Electronics Commercial & Trading Co., Ltd.

2013 Establishment of Sanken North America, Inc., in the United States.

2017 Establishment of Sanken Electric (Thailand) Co., Ltd., in Thailand.

1952 Headquarters Plant completed at the current site

1967 Kawagoe Plant

Headquarters Semiconductor Technology Center

Allegro MicroSystems

Providing optimal solutions for power electronics and peripheral areas, contributing to society's innovations.

Social needs

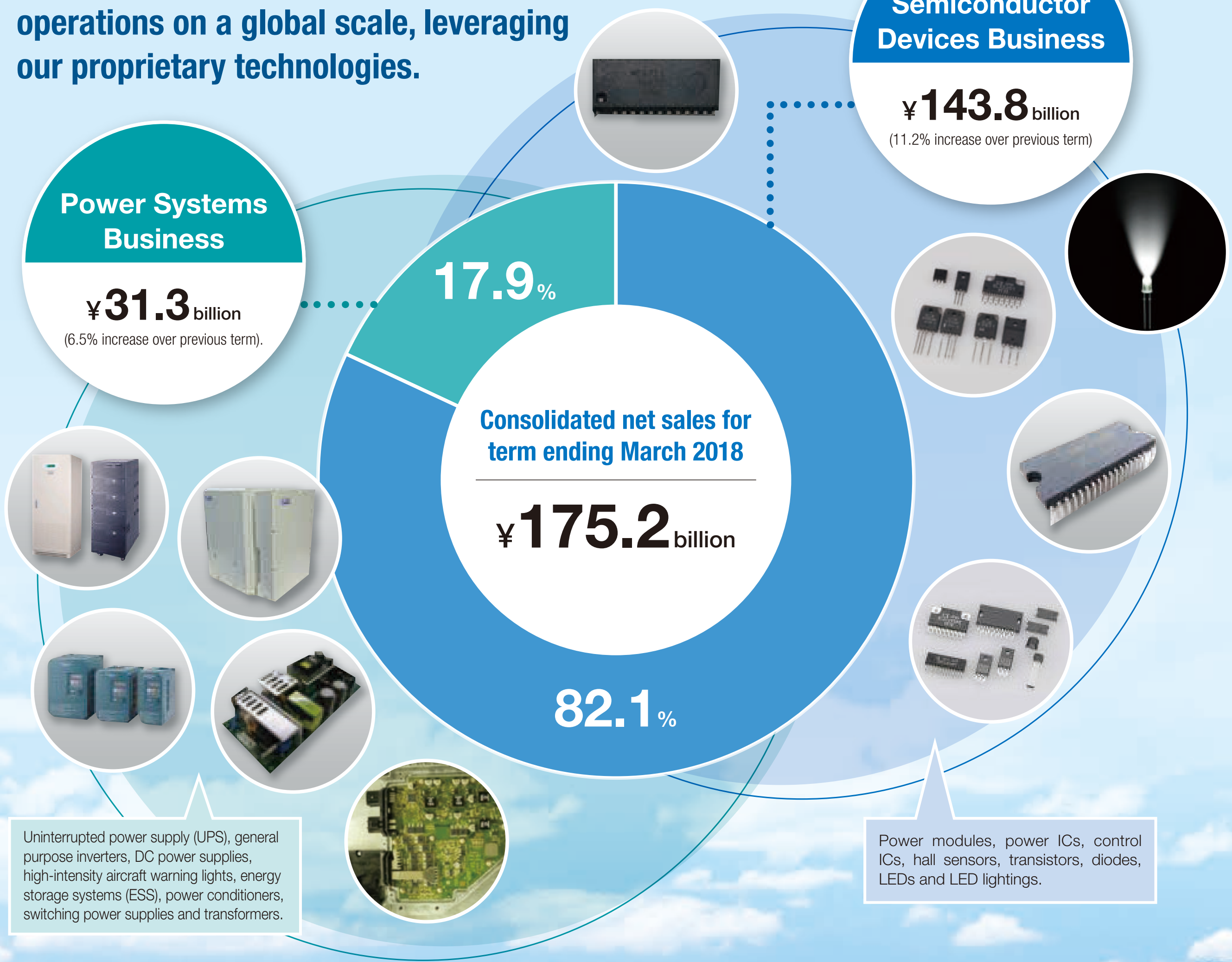
Eco-Friendly | Energy saving

- Expansion of IoT
- Big Data Analysis
- Expansion of AI
- Electric motorization of automobiles
- Automatic Operation
- Inverter conversion of white goods
- Direct current conversion of motors
- Expansion of reusable energies
- Sharing

Etc.

Business model of Sanken Group

Striving for innovations in our technological strengths and creative power, primarily in our core business of semiconductors, while pursuing reliability to proceed with the implementation of our business operations on a global scale, leveraging our proprietary technologies.



Uninterrupted power supply (UPS), general purpose inverters, DC power supplies, high-intensity aircraft warning lights, energy storage systems (ESS), power conditioners, switching power supplies and transformers.

Power modules, power ICs, control ICs, hall sensors, transistors, diodes, LEDs and LED lightings.

Value creation of Sanken Group

Power Electronics for Your Innovat!on

Power | Electronics

For our customers' innovations.
For each and every employee's innovations.
For our society's innovations.
The desire of Sanken Electric is to become a corporation that contributes through power electronics.

Sanken Electric is a specialist manufacturer of power electronics, primarily for power semiconductors. Power electronics refer to technologies and products resulting from the overlapping of power for driving electronic equipment in an efficient and highly precise manner, through the conversion and control of electric power and electronics. These technologies and products are utilized in a variety of fields, such as home electronics and audio-visual equipment, even in the automotive field, where electronics are increasingly incorporated. The key device in all of these is the power semiconductor. Power semiconductors, power management and power electronics comprise our business domain, where we pursue differentiation with our power devices, power modules and power solution technologies.

Products of Sanken Electric are utilized in a variety of scenes.

Dear Fellow Shareholders

Takashi Wada,
President
Sanken Electric Co., Ltd.

Business Performance and Principal Activities in FY2017

Business Structural Reforms Implementation Year

The global economy in FY2017 overall, including the economy of Japan, transitioned in a gradually recovering trend.

There was a strong tailwind on our side, with increased facility investments in the electronics industry, to which our company belongs, resulting in the expansion of the industrial machinery market, as energy-savings progressed in the white goods market that transitioned well. The demand for power semiconductors increased globally, against the backdrop of further developments with electrification and the popularization of environmentally compatible vehicles, which led to the steady transition of the automotive industry.

The management of our corporate group continued with the “commitment to growth markets” and “enhancement of the financial constitution”, also in FY2017, as our basic policies. This resulted in net sales of ¥175.209 billion, a 10.3% increase over the previous fiscal year and an operating income of ¥12.026 billion, a 103.3% increase over the previous fiscal year. The bottom line, on the other hand, sustained an extraordinary loss of ¥18.326 billion as-sociated with the implementation of business structural reforms, which led to the current loss attributable to the parent company shareholders of ¥11.421 billion.

Markets catering to the white goods and automotive sectors transi-tioned steadily to secure a trend in increased revenue.

The factor for increased revenue was primarily a favorable transition of sales products for the white goods and automotive sectors, primarily in markets overseas.

White goods indicated the most growth in our semiconductor devices busi-ness, with a growth of 31% over the previous year. In particular a 65% increa-se transpired in products for the Chinese market, also those for the Korean market indicated a high growth of 34%. The automotive business, which com-prises over 50% of the net sales in our semiconductor devices business, went through a steady trend as well, to secure a growth of 3% over the previous year. In the industrial machinery and consumer markets, continued increases to business performances by our consolidated subsidiary, Allegro Microsys-tems, LLC (hereinafter referred to as “Allegro”), led to a 15% increase over the previous year.

Our corporate group considered the automotive and white goods sectors as our priority target markets and therefore we conducted activities geared for proactive product developments and increased sales on a global scale, under the slogans of “power semiconductors”, as well as “eco-friendly and energy saving”. We believe that the increased revenue in FY2017 was achieved as our activities coincided with market needs and we envisage this trend continuing in FY2018 and subsequent years as well.

The earning structure was significantly improved by the impact from business structural reforms in addition to the effects from increased revenue.

The primary factor that led to a dramatic increase in the operating profit of 103.3% over the previous year was first and foremost the increased net sales. The increased profit of our semiconductor devices business was contributed to by the increased profit in the sensor and IC business at Allegro, as well as improved profits at our consolidated subsidiary, Polar Semiconductor, LLC (hereinafter referred to as “PSL”). Another major factor would be the impact from our “business structural reforms”.

The business structural reforms conducted in FY2017 involved a significant setback, as described below, but the resulting effects are steadily manifesting and improvements to our revenue structure has progressed. This created a positive impact that resulted in increasing the profits by ¥1.8 billion in FY2017, compared to FY2016. The effect in FY2018 is projected to be ¥3.3 billion over FY2016.

The primary objective of the business structural reforms in FY2017 is “improvement of the growth foundation as outlined by the medium-term management plan for the next term”.

Our corporate group has been promoting “business structural reforms” and this effort was accelerated in FY2017. The execution of the respective measures for structural reforms in FY2017 necessitated a major extraordinary loss of ¥18.326 million.

The business structural reforms implemented in FY2017 placed the following two programs into action in a bid to “improve the foundation for growth strategy towards the medium-term management plan of the next term”, while taking into consideration the ideal state of Sanken Group in a decade.

Firstly, we “cleared the negative legacy handed on from the past”. One of these was a withdrawal from the power module (PM) business. This involved the disposal of inventory and the optimization of the production scale for our consolidated subsidiary, “P.T. Sanken Indonesia”, which had been fulfilling the role as the main manufacturing plant for the business. The other was the withdrawal and scaling down of unprofitable products in the semiconductor devices business and therefore we disposed of the relevant inventory. We aim to further concentrate resources to the strategic markets in which we intend to expand our business through such actions.

The second of our programs was improving the profitability of Sanken Headquarters. We implemented a special early retirement program, as a means of optimizing the scale of employees at headquarters. This led to a reduction of 131 employees at headquarters. We will continue to “clear the negative legacy handed down from the past”, while improving profitability of headquarters, as described above and take action to “concentrate management resources for growth strategies”. In terms of our main strength the semiconductor devices business, we will push our expansion strategy to further concentrate our efforts into such strategic markets as the automotive, white goods and industrial machinery sectors. We will also implement measures to further accelerate growth strategies at Allegro and PSL, our principal consolidated affiliates overseas.

A capital increase through a third-party allocation has been performed with our consolidated affiliate, Sanken North America, Inc. (presently Allegro MicroSystems, Inc.), in order to achieve the respective measures and the gained funds of $291 million will be utilized for executing the respective activities for growth and for improving equity capital.

New Medium-term Management Plan "Medium-Term Management Plan 2018" and future growth strategies

Even though the numerical targets were not achieved with the previ-ous medium-term management plan, certain results were achieved strategically.

Regrettably, the numerical targets for the previous medium-term management plan the "Medium-Term Management Plan 2015", (FY2015 to 2017), were not achieved. The target of ¥200 billion, for net sales of the final fiscal year, was not attained with the performance being ¥24.8 billion short, while the operating profit on the sales rate, targeted for 10% was unattained reaching only 3%. Net sales suffered as the growth of business activities for strategic markets fell to lower levels than planned. We were unable to accurately respond to the rapid growth of demand for intelligent power modules (IPM) in the white goods market, whereas in the automotive market Sanken products experienced significant delays to increases in sales for advanced driver-assistance systems (ADAS) and electrification, when compared to the growth of Allegro products. Profitability also recorded lower than the target, due to the delay in implementing highly value-added products for strategic markets and the delay in improving the costs for existing products.

In terms of implementations for strategic measures, we believe we were able to achieve results that will set the foundation for our new medium-term management plan. Firstly, we have achieved a definite growth in strategic market businesses. Although our activities did not achieve our targets as described above, the results and growth that will lead to our future endeavors were indeed indicated. For example, with the automotive products our Allegro products continued to sustain a favorable trend over three years through this medium-term management plan, while intensification of regulations relating to fuel economy, environment and safety occurred and electrification continued to accelerate. We were also able to accelerate the growth of our shares in overseas markets with our products for the white goods market, primarily in China, which is a major consuming area, as well as the production site, all while rapid conversion to inverters and DC fans were taking place. Secondly, there were achievements attained through our business structural reforms. The business structural reform we implemented during FY2017 involved improving the foundation for promoting growth strategies according to our new medium-term management plan, as described above. We will realize even greater growth with our new medium-term management plan.

Plans for ten years on, an ideal state over a long term, were established as we formulated our new medium-term management plan.

Our method involved first identifying a long-term vision for our corporate group in formulating our management concept, then drafting our medium-term management plan as a program for achieving our objective.

We cite "realizing a highly profitable enterprise with growth driven by the performance of our original technology, people and organization", as our long-term ideal state.

We will also concentrate our management resources of our corporate group in the three business domains, "power semiconductors" (including sensors), "power management" and "power electronics". We aim to achieve net sales of ¥330 billion and an operating profit on a sales rate that exceeds 15% in ten years, as the results of such efforts.

New fields in which to focus our efforts will be aggressively pursued under the new medium-term management plan "Medium-Term Management Plan 2018".

The numerical targets of ¥200 billion in net sales and 10% for an operating profit on the sales rate will be pursued under the new medium-term management plan, "Medium-Term Management Plan 2018" (FY 2018 to 2020). This will be our yet another challenge for achieving the objectives set by the previous medium-term management plan, "Medium-Term Management Plan 2015".

We are aiming to increase net sales by 24.8 billion (14%) over a three-year period. Efforts to improve our business performance of the products for automotive and white goods markets by 20%, will continue in our semiconductor devices business, which is our main strength. In terms of the power system business, we will aim to expand our social system business, however in the meantime the unit business is expected to be scaled down, due to the impact from our business structural reforms, therefore we project an overall reduction by 11%.

We intend to proceed with new product developments that match the market needs in the "semiconductor devices business", which is our core business, with our new organization structured according to "products" on one hand, while also having another set of management organizations based on "markets" crossing over them.

We are incorporating a new development method, the "Sanken Power-electronics Platform" (SPP) for the development of new products. Establishing a platform as a method for development that facilitates improved efficiency and reduces costs, while the sharing of parts, components and materials, as well as sharing and the automation of production lines, can be advanced.

Products we will focus our efforts on will be "digital power supply ICs", "electric vehicle modules" and "next-generation sensors", as these three will be considered the driving force behind our growth and proactive action will be implemented in these areas. The "digital power supply ICs" will be a new domain for our corporate group, however we will increase the number of our engineers and promote aggressive developments in this domain to grow our business to a scale of about ¥15 billion in ten years. In terms of the field for automotive products, we will focus on such areas as electrification, enhanced safety and improved efficiency as we accurately capture the needs of the market for "module" products, for which Sanken Group has an advantage. The third aspect of the "next-generation sensors" is a new field vested in our consolidated subsidiary, Allegro. In terms of automotive products, we will promote our advancements into electric vehicle and ADAS related fields, while also making new inroads into such areas as industrial machinery and consumer markets.

The facility investments planned under the new medium-term management plan is ¥44 billion, an eight billion yen increase over ¥36 billion, which was the actual record for the three-year period of the previous medium-term management plan. In addition to investments intended for the mass production of new products associated with semiconductor devices business at Sanken Electric, investments will also be made to increase the production of existing products, enhancements to our production engineering capabilities and automatic manufacturing plants, while concentrating and enhancing our development functions through the relocation and expansion of the headquarters at Allegro, as well as improving our inspection and production capabilities and increasing our capabilities with PSL.

Corporate management will be promoted to create the future of Sanken Group, with consideration for changes over time.

The business environment surrounding Sanken Group is currently undergoing a major change. The evolution of AI and IoT means that society will arrive at a technological singularity and we might perhaps move into a new future era. It would be fair to surmise that at this present moment we are at the threshold of such a major change.

Sanken Group will start our growth for the future with the aim of achieving the ideal state ten years further on, while taking into consideration such aspects of eras.

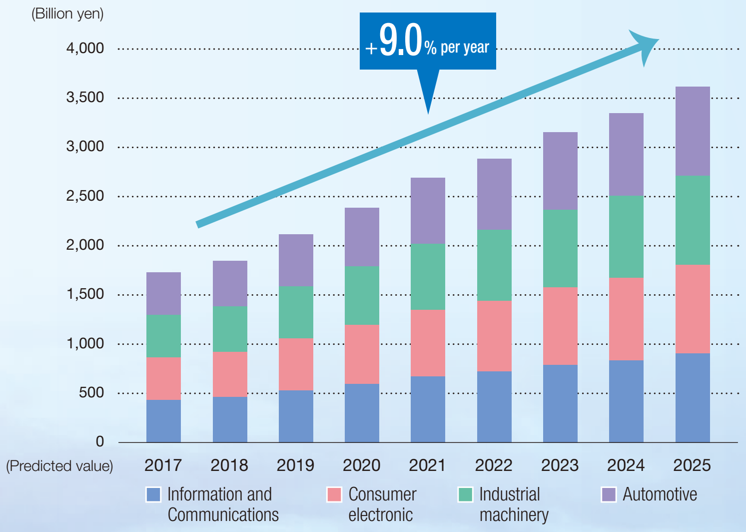
We ask our shareholders and other stakeholders of our company to continue granting us their understanding on the management of our corporate group, while keeping high expectations for our business developments in the future.

Special Feature: "FY2018 Medium-Term Management Plan"

Market environment forecast

Growth is predicted for the power semiconductor market and new energy related market.

Power semiconductor market trends

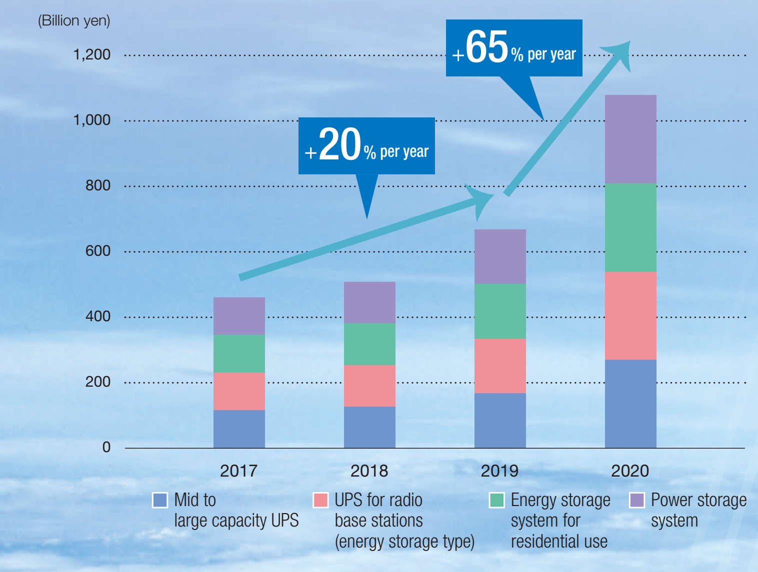


- Increasing demand for industrial machinery and automotive applications drive market growth.
- The consumer market, which includes white goods, is also growing steadily.

Source: "Latest Trends and Future Prospects of Progressively Developing Power Semiconductors 2015-2016" from Yano Research Institute Ltd.

Note 1: Based on manufacturer shipment values;
Note 2: Predicted values current as of January 2016.

New energy related markets trend



- The "energy storage" applications increase domestically, as well as overseas.
  - · Demand for solar power generation increase in the ASEAN region.
  - · Rapid increase domestically, due to VPP*.

*VPP: An abbreviation for "Virtual Power Plant". Energy creation, energy storage and energy saving resources (solar light, storage battery, demand-response, etc.) distributed in various localities are integrated and controlled by utilizing the IoT to function as if it is a single power plant. Popularization is expected, against the backdrop of electric power deregulation.

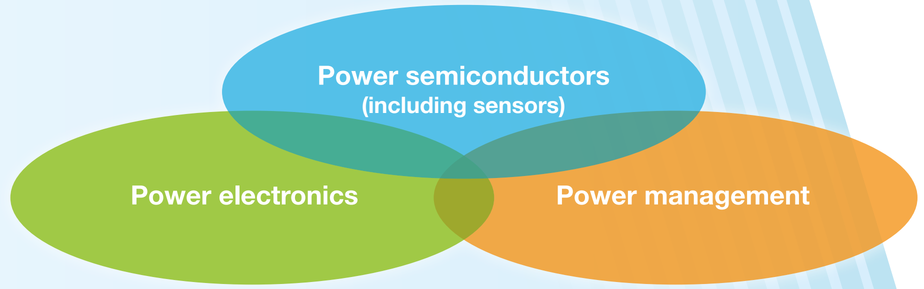
Source: "Future Outlook for Energy, Large Secondary Batteries and Materials 2016" of Fuji Keizai

Long-term vision and new medium-term management plan

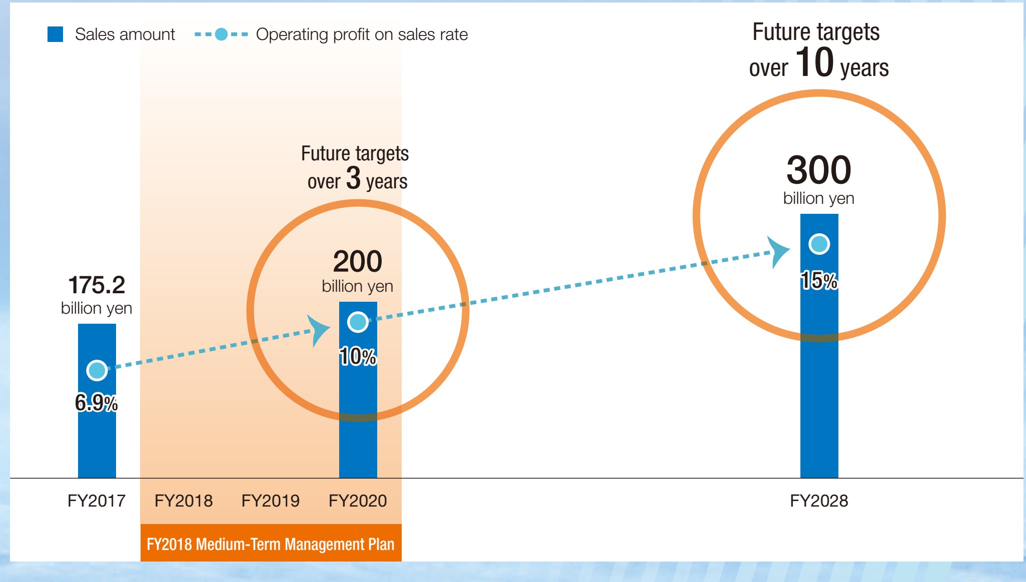
Ideal state over long-term

Realizing a highly profitable enterprise with a growth driven by the performance of the original technology, people and organization.

Focusing management resources on the following three business domains.



	Sales amount	Operating profit on sales rate
Future targets over 10 years	330 billion yen	15 % or more
Future targets over 3 years	200 billion	10 %



Growth strategy by business operations

Strategic markets and practical growth strategies

Sales increase target over three year period (from FY2017 to FY2020)

SANKEN Device Business Growth Strategies

Automotive market

Product developments from a medium to long-term perspective will be implemented with the keywords of electrification, safety and high efficiency.

[Principal fields targeted for promotion of future developments]

- **Electrification:** Auxiliary motors, battery related components and modular product groups.
- **Safety related products:** Power system related components, bare chip and surface mounted components.
- **Efficiency improvement:** Alternator related and high-efficiency diode products.
- **Automotive interiors:** Car interior chip LED products

White goods market (IPM)

Increased production of IPM is planned in response to expected acceleration with the progress of inverter conversions and DC conversions in principal producing countries, such as China and South Korea.

[Principal fields targeted for promotion of future developments]

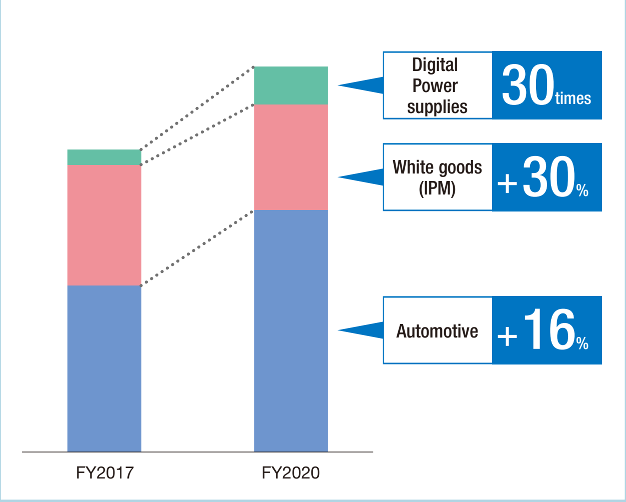
- **Air conditioners:** Compressors and fans.
- **Washing machines:** Main motors.
- **Refrigerators:** Compressors.
- **Small household appliances:** Low voltage motors (cordless household appliances).

Digital Power supplies

Promote aggressive expansion of business operations in this market, which is considered a new market for development, while aiming to nurture the business over a medium to long period with the aim of becoming the next revenue generating business unit.

[Principal fields targeted for promotion of future developments]

- **First 3 years:** Lighting and OLED TV.
- **Subsequent 3 years:** Entry and expansion of business in automotive market.
- **Further 3 subsequent years:** Entry and expansion of business in motor market.



SANKEN Power System Business Growth Strategies

Industrial machinery and consumer markets

Promote development and increase the sales of various power systems that support the progress of an IoT society, which connects a diverse range of devices.

[Principal fields targeted for promotion of future developments]

- **IoT:** Increase sales of outdoor UPS in response to miniaturization and decentralization of power supplies.
- **VPP:** Provide ESS to power markets, in which deregulation is progressing.
- **Industrial machinery:** Increase sales of compact and highly efficient switched-mode power supplies (SMPS) units for industrial machinery markets of such products as robots.
- **Service:** Package "product & maintenance & monitoring" as a set for sale.

Automotive market

Aim to increase orders received for power system related products, for which demand will continue to increase in association with the progress of electrification.

[Principal fields targeted for promotion of future developments]

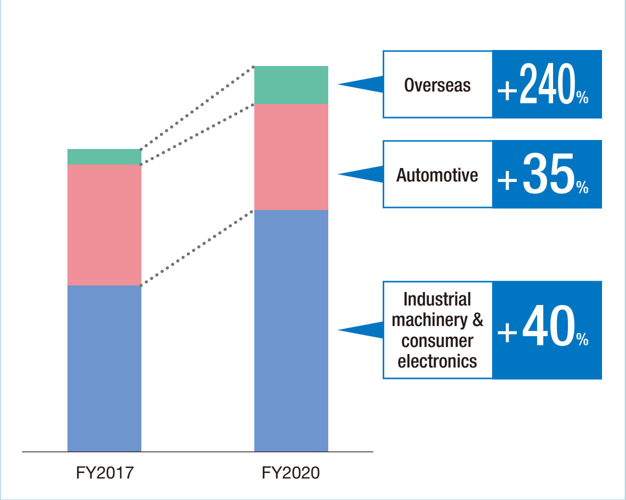
- **Automotive boards.**
- **Electric vehicle battery controls.**
- **Pioneering fields that merge with device technologies.**
  - Inverter modules for large capacity motors.
  - Wireless power transfer, etc.

Overseas markets

Aggressive expansion of business operations will be pursued in the ASEAN market, where market expansions are projected in the future, in addition to China.

[Principal fields targeted for promotion of future developments]

- **ASEAN:** Efforts made to improve electrification rates, responsive action to cater to the needs for a stable supply of electric power and to expand communication infrastructures.
- **China:** Increasing sales of VVVF inverters with progressing implementation of environmental regulations.
- **Europe:** Implementation of V2H through tie-ups with business partners.



Allegro's Growth Strategy

Automotive Market

Implement growth strategy based on Allegro's strong competitive advantage in sensor and BLDC control technology, with a focus on automotive applications.

[Application areas in development]

- **Eco-autos:** Motors, Power Management
- **ADAS:** EPS, Power Management, Motor
- **ICV's:** Transmission, Cam shaft, Brake

Non-automotive Market

Apply technologies gained in automotive market to penetrate and expand non-auto applications such as industrials and consumers.

[Application areas in development]

- **Data center servers:** Fan motor,
- **Industrial motor control**
- Green energy inverters: Solar, wind etc.

Global focus

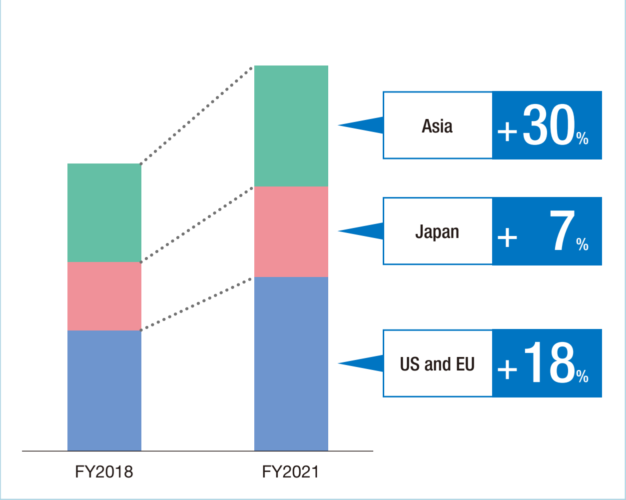
Expand US and EU markets, plus augment Asian markets.

Application focus

Seek further growth in automotive market as the core.

Product focus

Prioritize sensor business as the main, and leverage increasing opportunities in power IC business as well.

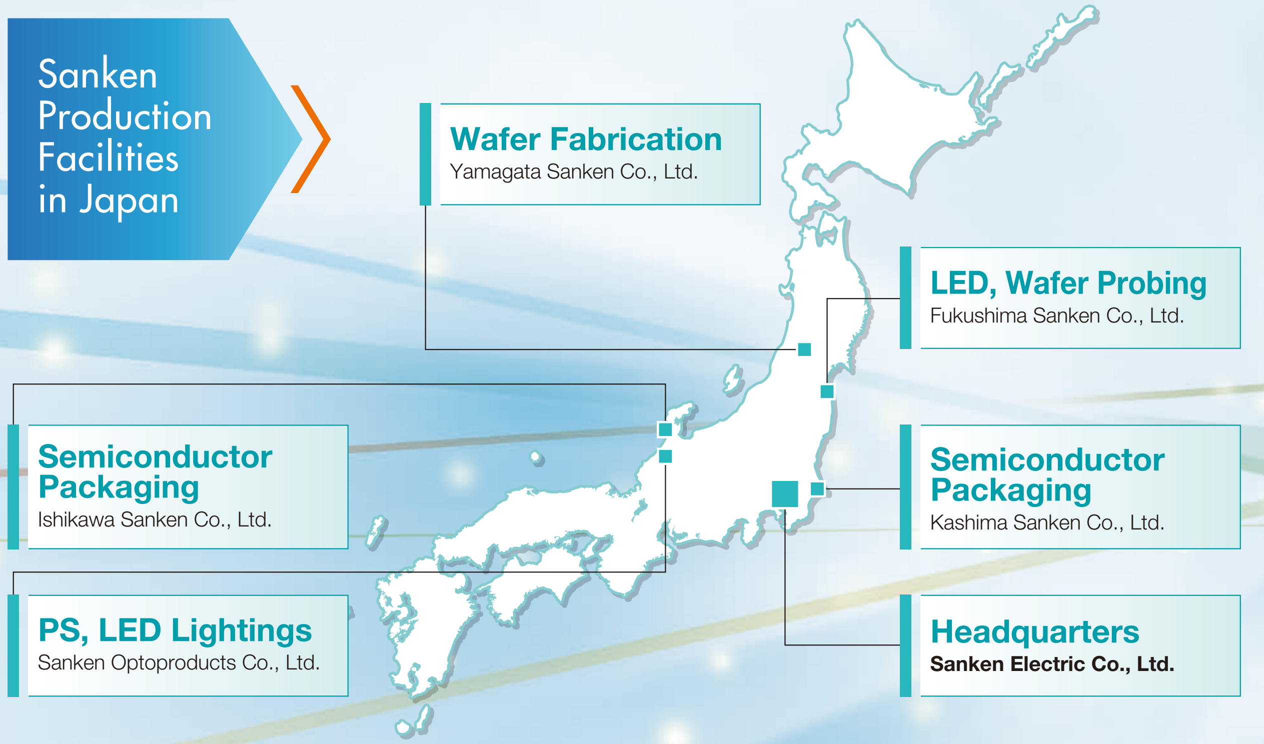


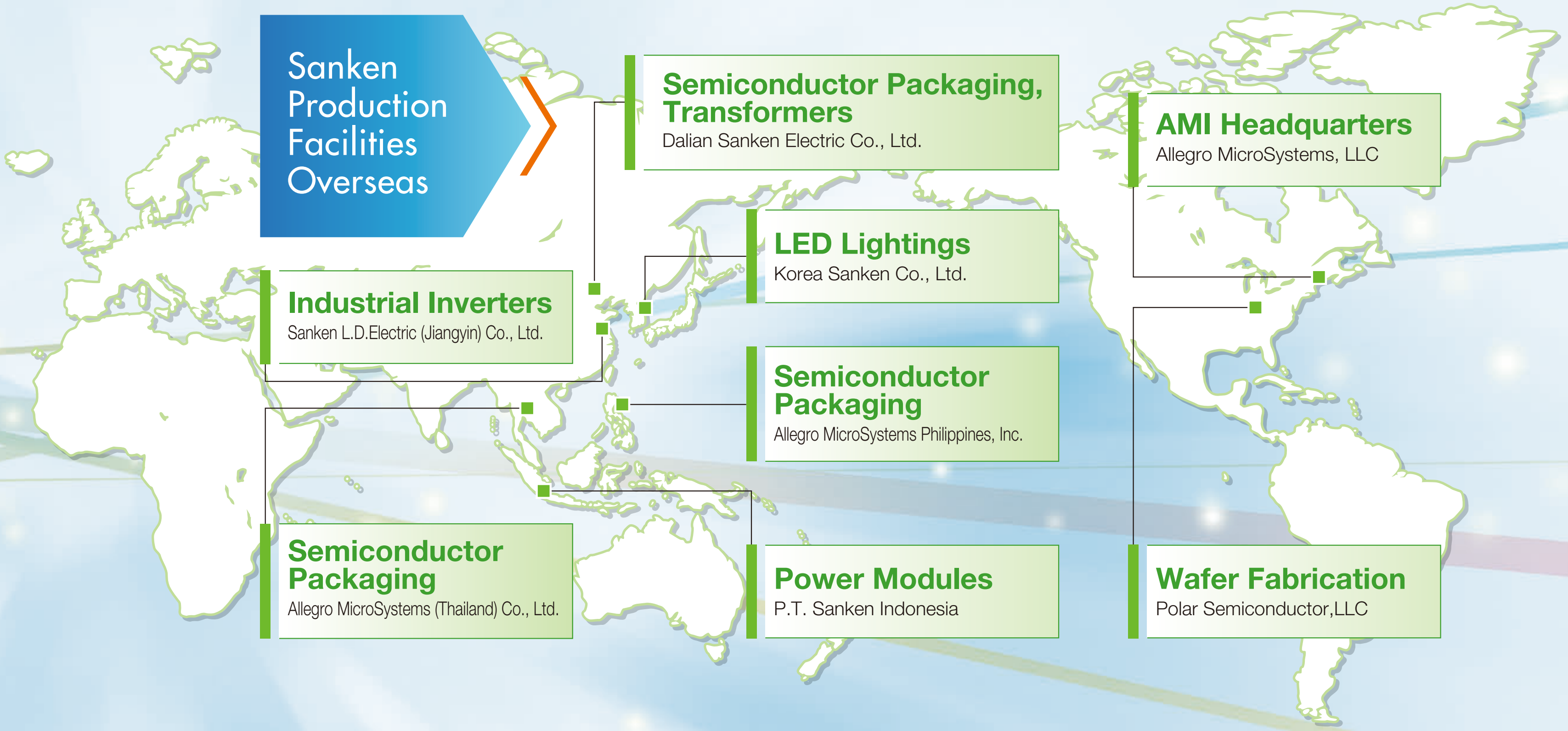
Global Network

Sanken Electric and its affiliated companies in total have sales and production facilities in 11 countries and regions including Japan, and are trying to expand their business on a global scale through application of their unique proprietary technologies.

With the exercise of appropriate management decision-making on a global basis for both the development and production aspects of business, Sanken always strives to choose "the best available decision from "the overall group-wide perspective." This management philosophy is best represented in the arrangement in the semiconductor segment, where Sanken and its group companies are trying to shorten the development cycle time for highly sophisticated multi-functional products through a collaborative trilateral arrangement combining Sanken Electric's power semiconductor technology including packaging technology, Allegro MicroSystems, LLC's (AML) digital and high integration technologies, and Polar Semiconductor, LLC's (PSL) wafer processing technology.

In addition, enhancements to the production capacity will be aggressively supported for the "eco-friendly and energy saving" market, with high growth projected, while wafer supply systems at PSI and Yamagata Sanken will be improved in front-end processes, through production capacity increases to the wafer process. Production lines for the ICs of automotive products and white goods will also be enhanced at Headquarters, with sensor processes improved at AMI in Thailand and the Philippines.






Sanken Electric Co., Ltd.


Yamagata Sanken Co., Ltd.


Fukushima Sanken Co., Ltd.


Kashima Sanken Co., Ltd.


Ishikawa Sanken Co., Ltd.


Sanken Optoproducts Co., Ltd.


Sanken L.D.Electric (Jiangyin) Co., Ltd.


Dalian Sanken Electric Co., Ltd.


Korea Sanken Co., Ltd.


Allegro MicroSystems Philippines, Inc.


P.T. Sanken Indonesia


Polar Semiconductor, LLC


Allegro MicroSystems, LLC


Allegro MicroSystems (Thailand) Co., Ltd.

Review of Operations

Semiconductor Device Business

Semiconductor devices sit at the center of Sanken's entire business, and our products in this core business segment range from power ICs to high-voltage large-current transistors and diodes, LEDs, as well as Hall-effect sensor ICs. Most of our semiconductor devices belong to an engineering field known as power electronics and deal with conversion and management of electric power. They are used as key components in various consumer and commercial products, including automobiles, home appliances, industrial machinery, AV equipment (IT and mobile equipment), telecommunications equipment and LED lighting fixtures.

Sanken Electric and its US subsidiary, Allegro MicroSystems, LLC, strive to accelerate product development with our ample reservoir of proprietary technologies, and offer to the market products best suited to satisfy the specific needs of our customers.

Market Conditions and Fiscal 2017 Results

"An eco-friendly and energy-saving" market steadily grew during the three years of the "Medium-term Management Plan 15" (FY2015 to 2017). In the automotive market, the electrification rate improved, while the number of hybrid and electric vehicles continued to increase, against a backdrop of enhanced regulations on such aspects as fuel economy, environment and safety. This resulted in a rapid increase in the use of motors, which in turn led to an increasing importance for the role played by automotive power semiconductors that control such motors. Furthermore, in the white goods market the "conversion to inverter", with significant energy saving effects, progressed rapidly for air conditioners, refrigerators and washing machines, while the "BLDC motor conversion" that accommodates an improved efficiency for motors also progressed rapidly, which further increased the importance of power semiconductors controlling such features.

In such a market environment our corporate group continued to consider the "semiconductor device business" as our mainstay business in FY2017 as well and we conducted our business by focusing on the growing market using the key words "eco-friendly and energy saving".

We also improved our organizational foundation as of April 1, 2017, in our effort to establish a foundation for achieving growth strategies, starting from the next medium-term management plan, since FY2017 was the final fiscal year of the "Medium-term Management Plan 15". In terms of developments, we have worked on improving the efficiency of our technologies while shortening the lead times by enhancing resources for technology developments, as well as by focusing our efforts on our new product progress activities in strategic markets and strategic products. As for production, we have worked on achieving optimized production and cost reductions with raw materials by aggregating the functions of management, as well as distribution and material procurements. Regarding quality assurance, we implemented organizational reforms that have resulted in a reorganization according to the respective functions in assuring product and manufacturing quality, to further enhance our quality assurance framework.

As for individual markets, firstly in the automotive field, we promoted our environmental response activities and modularization, whereas in the overseas markets we continued to increase sales in China and Korea, while further promoting our sales and technical collaborations with Allegro MicroSystems, LLC in Europe and North America, continuing with our market expansions. In terms of white goods, we have proceeded with improving our production organization for high inverter ICs (IPM) to accommodate further increases with household appliances equipped with inverters. Regarding the power supply market, we pressed on with aggressive introductions to products in such strategic markets as white goods and industrial machinery by pursuing proprietary product developments, using the keywords Power IoT. With regards to our LED business, we pressed on by adding high value through our unique differentiating technologies, such as optimized packaging, as well as light and color control technologies, primarily with automotive LEDs.

All this resulted in an increase in consolidated sales for our semiconductor business by ¥14.513 billion (11.2% increase) over the previous fiscal year to reach ¥143.836 billion. The principal causes of such increases to our sales were a steady transition of sales for products in the white goods and automotive markets, as well as growth in sales of products for the industrial machinery market. Furthermore, the consolidated operating income increased by ¥4.985 billion (53.9% increase) over the previous fiscal year to reach ¥14.236 billion.

Future Agendas

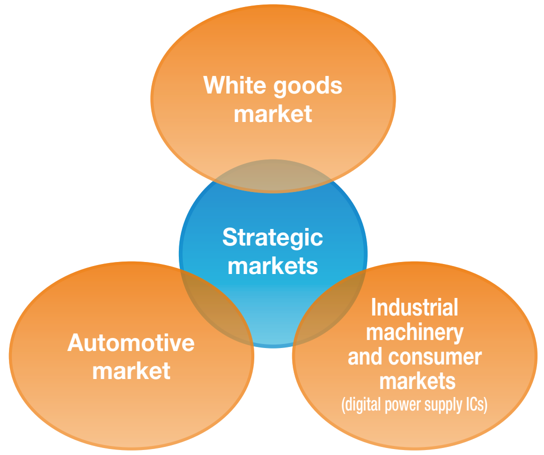
The power semiconductor market is expected to continue growing steadily in the future, primarily by catering to the automotive, industrial machinery and white goods markets.

We improved our organizational foundation in FY2017 and we have, for the most part, finished with improvements to our foundation for accelerating growth by capturing increasing demand in the future. Using this as the groundwork, we intend to implement our activities for strategic markets and strategic products according to the "Medium-term Management Plan 18" that started in FY2018, with the semiconductor device business continuing to remain our core business.

We will focus our efforts on product development in areas of "digital power supply ICs", "electric vehicle modules" and "next-generation sensors", which are considered the new growth engines of our business. In terms of development organization, we have transitioned to business units based on products (vertically organized) while organizations for strategic markets, to which our efforts will be focused, were set with responsible managers appointed for the respective markets (horizontally organized). The framework for responsibility was clarified by establishing such a matrix defined by products and markets to enhance our product development capabilities and the shortening of our development speeds.

The strategic markets to which our efforts will be concentrated are white goods, automotive, industrial machinery and consumer markets. An acceleration of conversions to inverters and BLDC motors intended for energy conservation, with reduced noise and higher functionality expected in the white goods market.

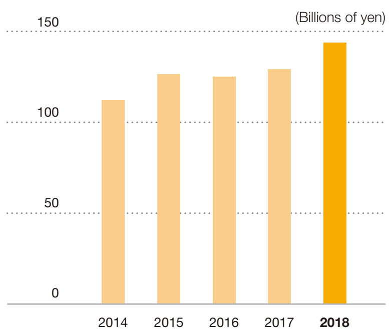
Strategic markets for semiconductor device business



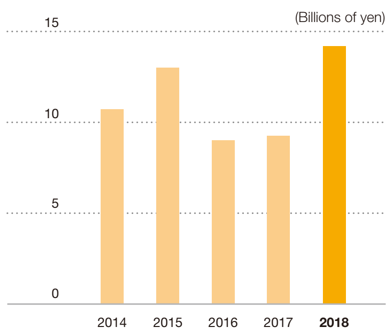
Progress with electrification, improvements to safety and efficiency, are expected in the automotive market. The expansion of the market for digital power supply ICs, with ultrahigh efficiency that can incorporate communicating functions, is expected in the industrial machinery and consumer markets. We will pour our energy into product developments for these markets in the future, while increasing the sales for existing products and making inroads into markets where existing products can be utilized for new applications. Product developments, with the keywords of "Power IoT" will be promoted particularly in the field of digital power supplies, with Power IoT to be used as a ticket to enter into the automotive and motor markets of the near future.

Increased sales will be sought by Allegro MicroSystems LLC, our US subsidiary that drives our business in Europe and North America, with such products as speed sensors, current sensors, linear sensors, motor control ICs and the like in the automotive market, the core market, as well as in the industrial machinery and consumer markets. The development of next-generation sensors will also be promoted with the aim of contributing to the business performance at an early stage.

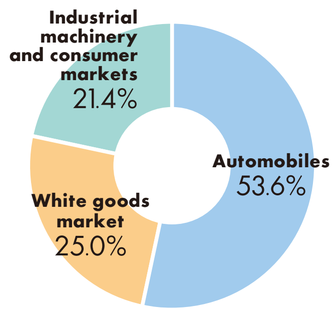
Net Sales
Years ended March 31



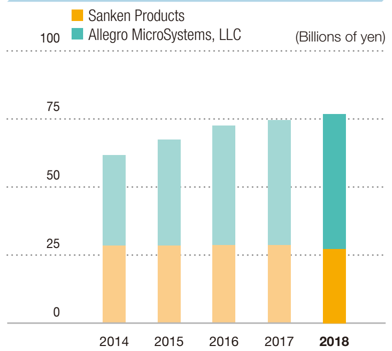
Operating Income/Loss
Years ended March 31



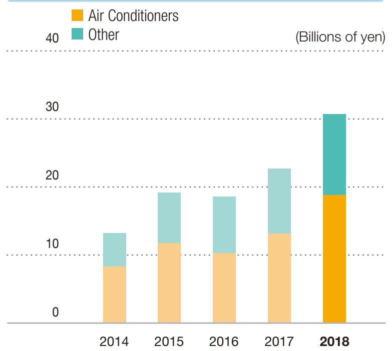
Semiconductor Device Sales by Use
Years ended March 31



Focus Market: Automotive
Years ended March 31

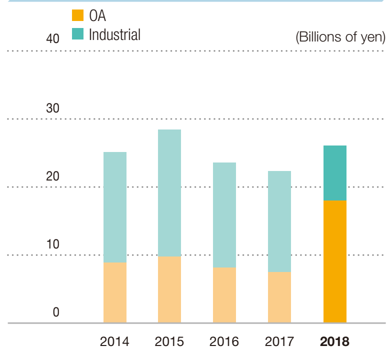


Focus Market: White Goods
Years ended March 31



*Non-consolidated

Focus Market: OA & Industrial
Years ended March 31



Review of Operations

Power Systems Business

The "Power System Business" was established as a business segment in FY2017, by merging the "Power Module (PM) Business" and the "Power System (PS) Business".

The Power System Business will be implemented by primarily focusing on the excellence in the manufacturing of "social system" and "unit" related products. The former consists of products, such as large DC power supplies, high-intensity aircraft warning lights, or "strobes", uninterruptible power supplies, and general purpose inverters for industrial motors, and such products have earned customer trust and a reputation for excellence in socially critical facilities where power interruptions are absolutely unacceptable, such as telecommunications systems, dams, power transmission substations, airport facilities, highway facilities, tunnels and the like. The latter consists of former PM business products, in which products are converted to modules and enhanced with intelligence, as a new business direction for such applications as the automotive board business, in addition to products for communication, industrial machinery and power supplies for servers.

Market environment and business performance of FY2017

Intended to ensure reliable growth in the power system business domain, the business units of power modules and power systems were merged in our group as of April 1, 2017. The reorganization and addition of the organization was conducted in this manner and we reduced duplicated functions, while switching to an optimum business structure through the utilization of the "cost reduction capability" of our power module business and "quality craftsmanship" of our power system business, concentrating our development resources to strategic products and enhancing our marketing functions for individual markets.

Under such a new organizational framework, we introduced our new products in the power system business, such as rectifier units that respond to such needs as miniaturization and improved efficiency, in anticipation for the recovery of the communication market. We developed and introduced outdoor UPS systems for such new applications as communications, signals, road monitoring and crime prevention systems. In the new energy market, we implemented steps to create new power and storage systems of the type that constitutes a "move away from FIT", which is projected to become the mainstream product type in the future, in association with the amendment of FIT (Feed-in Tariff Scheme for Renewable Energy).

However, the market environment for our power system business continued under severe conditions. Products intended for audiovisual and OA markets proved unprofitable with the backdrop of intensified price competition for final products and as a result we started to withdraw and reduce our business operations in those markets commencing from FY2017. The new energy market, which is a new market that we have been strategizing for increased sales, indicated sluggish growth, due to stunted popularization and this led to a significant delay in increased sales in this market.

All this resulted in an increase of consolidated sales for the power system business by ¥1.923 billion (6.5% increase) over the previous fiscal year to reach ¥31.373 billion. Sales activities were suppressed for products with profits that proved difficult to secure, such as adapters for television sets and compact printers, which resulted in a reduction in sales for unit products (formerly PM products), however the product sales for the base stations of mobile phones recovered in the communication market and became the primary factor that increased our revenue. Increased sales and an improved composition of products sold led to a consolidated operating income of ¥474 million (previous fiscal year a consolidated operating loss of ¥565 million was recorded).

Future Agendas

We made a decisive move to reduce and withdraw our activities in the power system business of the unprofitable sector during FY2017, as described earlier and we sought to improve our growth foundation by concentrating our resources into strategic core markets. We aim to accelerate the growth of our power system business from FY2018, based on the abovementioned foundation.

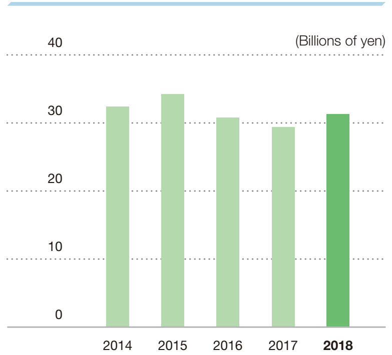
In terms of product development, we will create new products with the keywords "green energy", while keeping track of growth potential for new energy related markets in the future.

Strategic markets, in which our efforts are focused, will be comprised primarily of industrial machinery and consumer markets, as well as overseas markets, however endeavors will also be made to expand our activities in the automotive market as well. Uninterrupted power supply (UPS) units, for outdoor installations, will continue to move forward for the IoT domain, where miniaturization and the dispersion of power supplies are progressing in the industrial machinery and consumer markets, whereas the provision of energy storage systems (ESS) to virtual power plants (VPP) will be promoted in the power market, where deregulation is progressing. In terms of overseas markets, we will enhance our ability to respond to the need for stable power supplies, as the electrification rate grows in the ASEAN region. We aim to promote UPS sales through a collaboration with Indonesian businesses and expand our manufacturing and sales activities for automotive boards overseas, in addition to sales of VVVF inverters for motor controls in China, to accelerate our global expansion of the power system business overall.

Our activities implemented from medium to long-term perspectives include the creation of new technologies, new products and new markets by fusing the technologies of our semiconductor device business with the technologies of our power system business. Taking the automotive market as an example, the progressing electrification of cars will make the automotive market a principal target market for both the semiconductor device business and power system business. This will lead to an increased number of areas that span across these business domains and the fusion of technologies from both businesses will become essential. We will ensure that the acceleration of our business growth will be more reliably secured by promoting the development of technologies ahead of market needs for the near future.

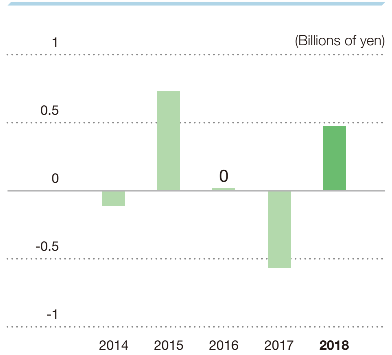
Net Sales

Years ended March 31



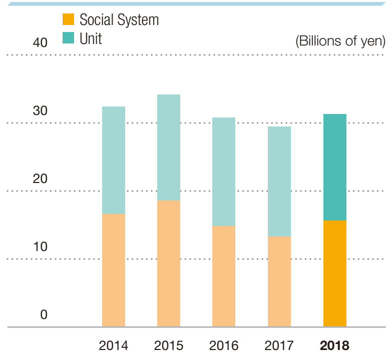
Operating Income/Loss

Years ended March 31

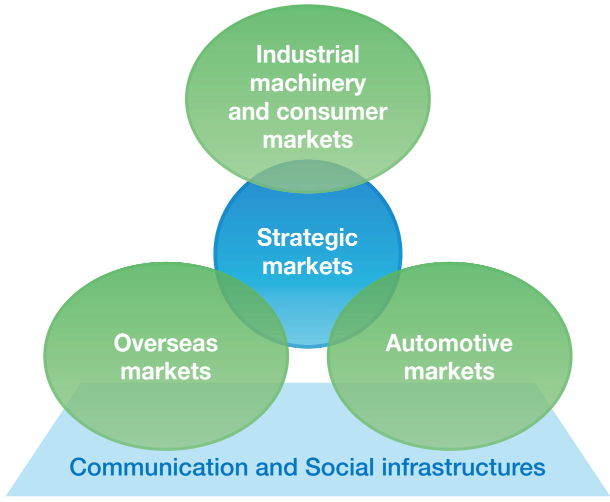


Power System Sales by Market

Years ended March 31



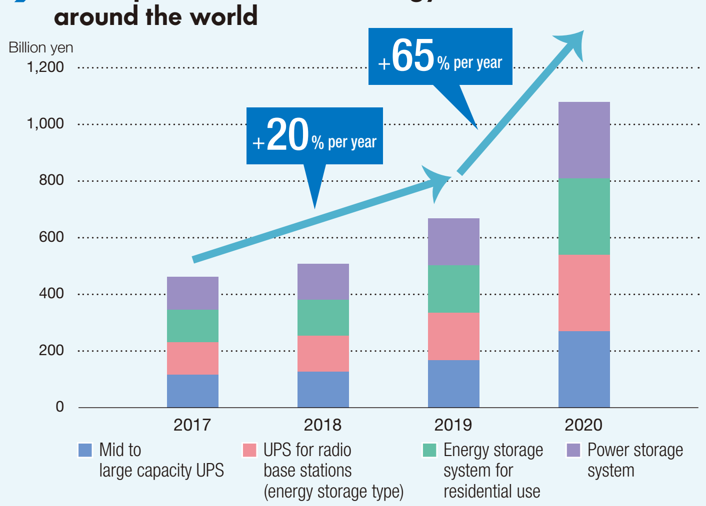
Strategic markets for power system business



Trend of new energy related markets

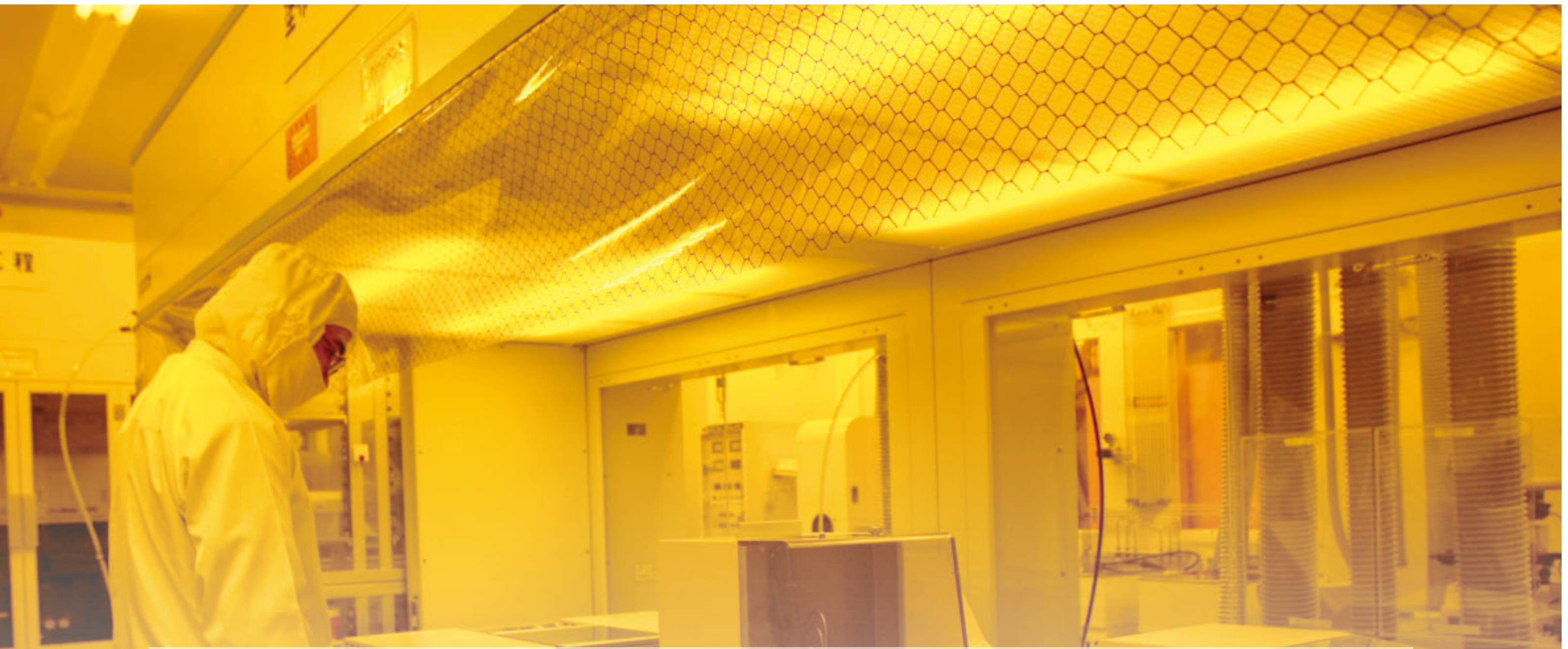
The new energy related markets around the world are predicted to expand steadily to reach a scale that is double that of 2017, by the year 2020. The increased applications for energy storage, such as UPS (energy storage type) for power storage systems and radio base stations especially, are expected to drive such growth. The materialization of the virtual power plant concept is predicted to progress in Japan.

Future prediction for new energy related markets around the world



Source: "Future Outlook for Energy, Large Secondary Batteries and Materials 2016" of Fuji Keizai

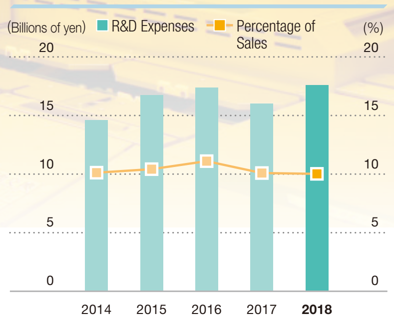
R&D and Intellectual Property



Our corporate group has secured leading global and domestic market shares for a large number of product categories, through the promotion of aggressive research and development based on a foundation of highly competitive technical capabilities, driven by the key words “eco-friendly and energy saving”, as well as “green energy”. In the future we will continue to accelerate our development of new technologies and new products aimed at the development of new markets and new applications that will further broaden the stage on which we conduct our activities.

R&D Expenses

Years ended March 31



Research and Development Policy

Sanken has defined its business domain to be “Power Electronics,” and is pursuing its research and development activities by focusing on the most promising growth stages in this sector.

We are conducting our research and development under the following two guidelines as our basic policy.

(1) Achieve a growth strategy with the concepts “eco-friendly and energy sav-ing market” and “green energy market” positioned as its core.

(2) Facilitate new product development based on the establishment of tech nological marketing and efficient development management.

Status of Activities in Business Operations

In the “semiconductor device business”, which is at the core of our group, activities have been concentrated on the develop-ment of products that will lead a shift to growth markets, through the introduction of technological marketing in product development, while development process control has been en-hanced to accelerate our pace of development. Furthermore, we have also been aggressively engaged in the product devel-opment of standard products for newly developing countries, which are exhibiting remarkable growth.

In the “power system business” we strived to expand our business opera-tions in “power generation, power trans-mission and distribution, power con-sumption and power stor-age” fields, with the keywords “green energy”.

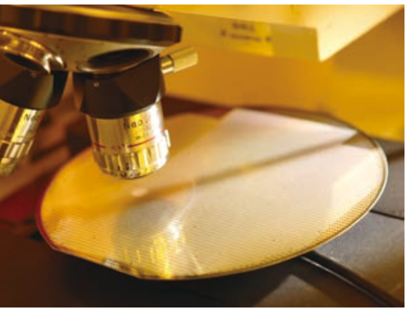
Activities to Enhance Development Capabilities Based on New Medium-term Management Plan

We consider the enhancement of our development capacities to be one of the most important management issues, as we aim to establish our place in a high position in the industry and grow to become a highly profitable enterprise, as outlined by the new medium-term management plan, “Medium-term Management Plan 2018”. We are focusing on establishing a new organizational framework to enhance our development capabilities, citing “pursue reforms to become an enterprise with technical recognition by differentiating with speed and an ability to execute” as our basic policy.

The first agenda is the promotion of design and operational reforms. In the past a series of product development operations were conducted separately by individual business units in our corporate group. The Device Division and the Power System Division will share development concepts, on which their development and design work will be based, in an attempt to transition our organization to one that shares all operations from development to manufacturing, as well as all the know-how, on a single platform. We aim to complete construction and start operating this “Sanken Power-electronics Platform” (SPP) at an early stage.

Outline of Sanken Power-electronics Platform(SPP)

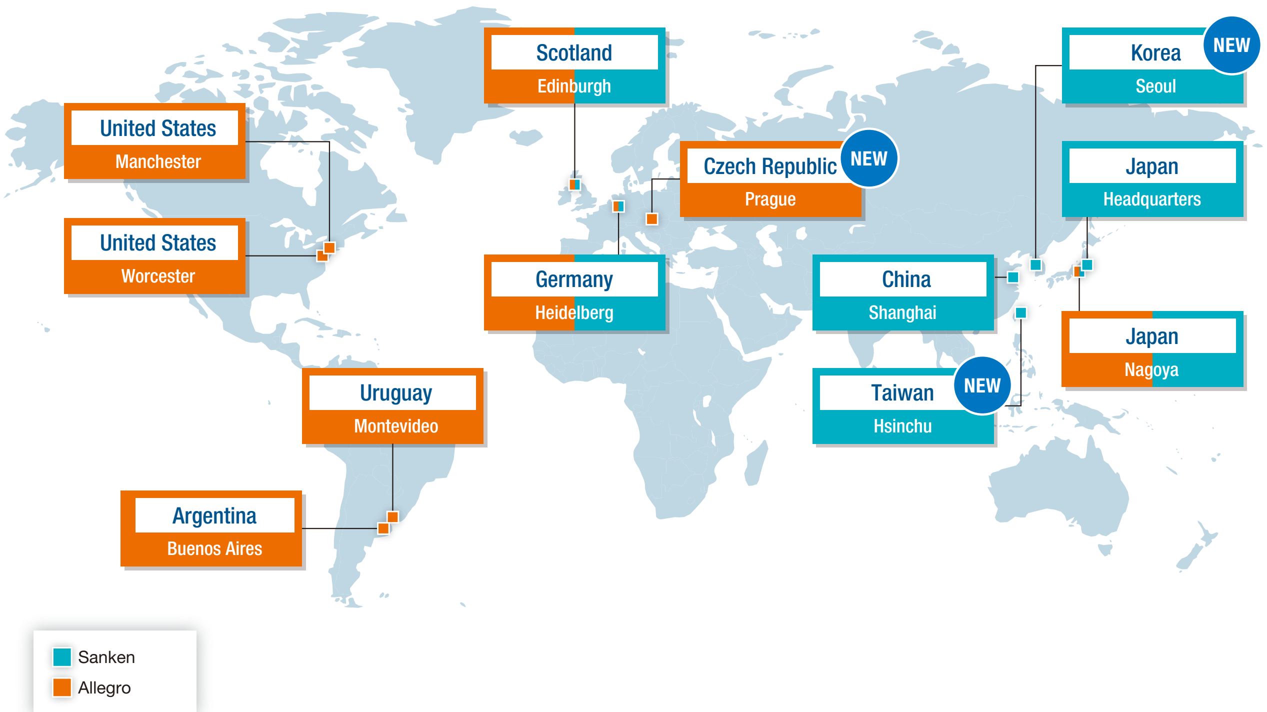
R&D and Intellectual Property



The second agenda is the enhancement of global development collaborations. Sanken's Engineering Headquarters plays a central role in the research and development of our corporate group, which is stimulating collaborative development activities with two companies, Allegro Microsystems, LLC (AML), which specializes in the design of products such as sensors and motor drivers, as well as Polar Semiconductor, LLC (PSL), which focuses on elemental development technologies. In terms of the business environment surrounding our corporate group, our principal market of the automotive field is experiencing a rapid transformation on a global scale, from gasoline powered vehicles to electric vehicles (EV). Faced with such a significant change, Sanken Group decided that it was important to further enhance such global development collaborations, therefore we are currently accelerating the development of modules intended for motors, such as those for driving electric vehicles, based on the comprehensive strengths of these three companies of our corporate group.

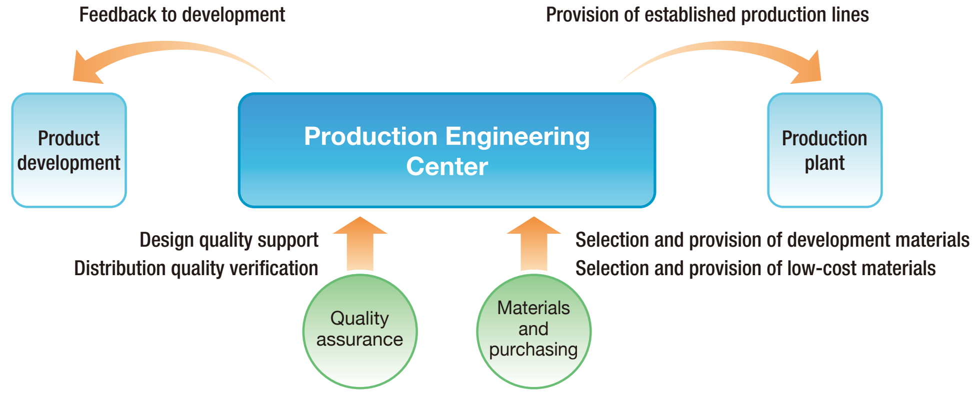
The third agenda is the substantiation of our global development bases. We are currently preparing organizations for the speedy development of products and technologies to match the needs that are embedded in our customers and the markets by establishing development bases near the markets of our clientele. We have been encouraging the enhancement of our development bases since last year. In Asia we established a center for developing packages, as well as a new company for the development of device elements in Korea (Seoul), while a new company for the development of software for digital power supplies was established in Taiwan (Hsinchu). In Europe we established a development center, which is affiliated with Allegro Microsystems, in the Czech Republic (Prague). In the future we intend to substantiate the staffing of our engineers at development bases located around the world.

Substantiation of global development bases



The fourth agenda is our Production Engineering Center concept. This project has the aim of maximizing our production engineering capacity, therefore we consider it absolutely essential to complete the early establishment of the "Sanken Power-electronics Platform" (SPP) described above and commence operations. Opening the Production Engineering Center early on and putting its operations on track are expected to bring about a significant improvement with the production engineering capability of our company overall, as it becomes possible to (1) accelerate the rate of processes from development to mass production, (2) improve elemental technology capabilities, (3) improve facility engineering capabilities and (4) accelerate production reforms and the like.

Principal functions of Production Engineering Center



Intellectual Property

It is of utmost importance to protect effectively the intellectual property rights that are related to our core technologies, side by side with creating innovative, high value added products through continuous research and development, in order to remain competitive in the semiconductor market place. To this end, Sanken has taken steps, not only to create intellectual property and legalize the respective rights, and to make effective use of this intellectual property, but also has laid out a system to accelerate development of new products and technologies through sharing of information between the research and development and the intellectual property organizations from the initial stages of develoment.

We are building an intellectual infrastructure, such as the intellectual property database and a patent survey system, while striving to nurture intellectual property personnel.

As for intellectual property strategies, we are deploy-ing strategies with an emphasis on "proactive" action.

Firstly, we will firmly press forward with the "acquisition of global intellectual property rights." More specifically, we will expand our patent ownership ratio abroad, in order to heighten the degree of freedom for implementing business activities in global markets. Since an awareness of the emphasis overseas has gradually spread throughout the company through activities implemented thus far, the ratio of patents acquired overseas are steadily increasing.

Secondly, we are aiming for "qualitative improvements to held patents." The asset value of the patents we hold are improved through patent development activities based on an analysis of the patents held by other companies, as well as by creating counter-patents through reverse engineering and building a "strong patent group" that can be used to conclude advantageous cross-licenses.

Thirdly, we are promoting the "optimization of open & close strategies". Activities that focus management resources on acquiring effective patents are performed to secure a competitive advantage through closing, with regards to technologies and know-how, which are part of our core technologies, while increasing the ratio of effective patents. As for commodity technologies, however, technical advantages will be sustained by securing know-how.

Fourthly, we will consider the "prevention of intellectual property risk and early solutions" as an important topic and we will conduct activities accordingly. We will enhance our capability to investigate and appraise global patents, while striving to reduce risks through a "discovery" system (evidence disclosure program).

Our intellectual property organization aims to maximize the contribution to business operations and improve cost performance through such activities.

CSR Initiatives

1 CSR Policies and System for Advancing CSR

Sanken Electric and the Sanken Group of companies clearly define the role of Corporate Social Responsibility ("CSR") as "social contribution through practice of our Management Philoso-phy," and are engaged in various aspects of CSR initiatives based on the following fundamental policies.

Fundamental CSR Policies

1. **Fair and just conduct in compliance with ethics and laws and ordinances**
   An enterprise is a member of society.
   As such, the Company will respond to society's trust with honest conduct of its business.
2. **Energy-saving products developed and marketed through integrated application of technological capabilities**
   To move closer to the ultimate goal to realize a sustainable society,
   the Company will use its portfolio of proprietary technologies and strive to solve environmental problems.
3. **Good relationships with all stakeholders**
   The Company will conduct necessary dialogue and cooperate with individuals, groups,
   and communities with which it has various forms of relationships.

The CSR Committee

Sanken seeks to continually improve its over-all corporate value by pursuing responsible business activities. As a special corporate-wide, cross-functional organization, the CSR Committee works to promote dissemination of the CSR concept and encourage CSR actions at all Group companies.

Basic Directions of the CSR Committee

1. **To align CSR activities with the management philosophy and business plans.**
2. **To exercise appropriate control of economic, legal, and ethical risks.**
3. **To disclose the outcomes of our CSR activities, and maintain dialogue with the various parties involved.**

The CSR Committee is an organization whose members include the heads of each headquarters, and is responsible for monitoring the CSR efforts conducted at Group companies.

CSR Promotion Framework

2 Corporate Governance

To raise the Company's corporate value and fulfill its social responsibilities, Sanken constructs and aims to continually enhance "a framework for corporate governance" to ensure the appropriate formulation of its management goals and implementation of those goals.

Basic Approach to Corporate Governance

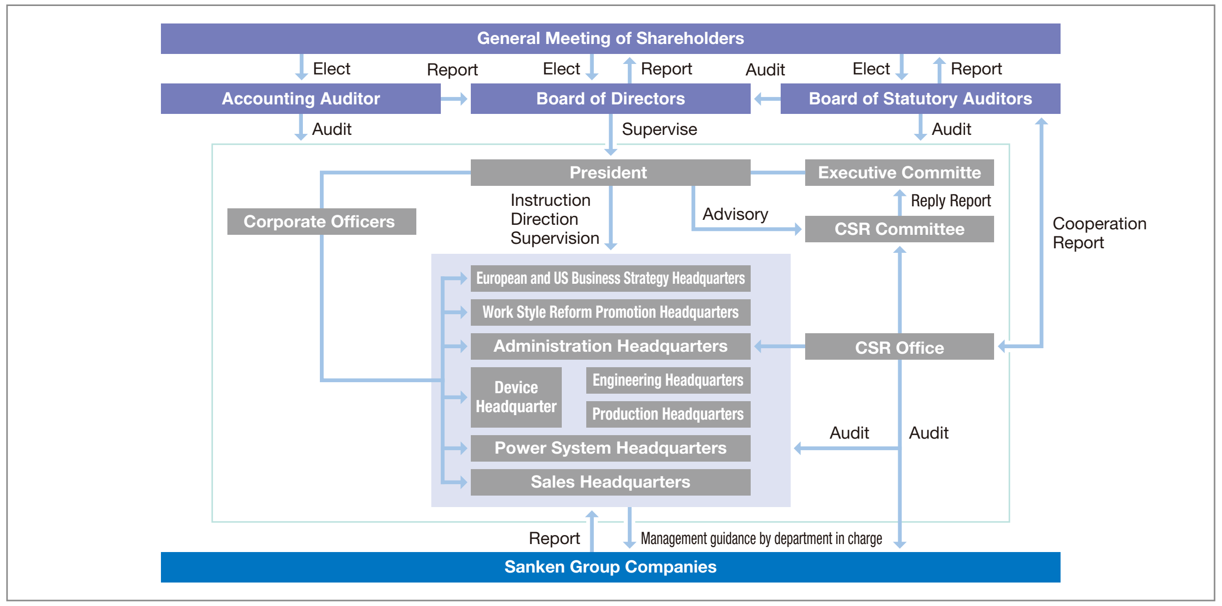
Sanken is striding forward to enhance accountability and ensure appropriate strategic decision-making by the Board of Directors, and strengthen the board's supervisory role, in order to boost efficiency, improve transparency and maintain sound management. At the same time, the Company is working to strengthen its corporate governance system through the activities of its CSR Office and IR Department. Additionally, we have set the term of office of directors at one year with the aim of ensuring that the Board of Directors is more responsive to changes in the business environment and to clarify that the performance of the duties of the Board of Directors is evaluated each year corresponding to the Company's fiscal period.

Corporate Governance Structure

The Company, a global business enterprise, believes that it must select "a corporate governance system that is best suited for the current unique nature of the Company," taking into consideration such factors as the need to open wide channels of communication with various stakeholders including overseas investors. Based on this thinking, the Company has adopted an Audit and Supervisory Board system comprised of the eight-member Board of Directors (including two Independent Outside Directors) and a four-member Audit and Supervisory Board (including two Outside Statutory Auditors).

Furthermore, the adoption of the corporate officer system has enabled the Company to effectively separate business execution from strategic decision-making and supervisory functions. This system is also designed to facilitate rapid responses to changes in the business environment. As of June 22, 2018, Sanken had 17 corporate officers, five of whom are serving concurrently as directors.

The Company believes the independence of both the two Outside Directors and the two Outside Statutory Auditors has been established, and that there is no concern of a conflict of interest arising with the general shareholders and that they are individuals who can be expected to make contributions to the Board of Directors.



■ Related to promote Corporate Governance ■ Related to upgrade Business Operations

Internal Audits, Audits by Statutory Audits, and Financial Audits

For internal audits, Sanken has the CSR Office that is staffed by nine individuals. The CSR Office is involved in on-site and off-site auditing and evaluating all corporate activities performed by employees, formulating proposals for improvements and providing execution support, and holding compliance education and training sessions.

The Statutory Auditors sit on the Board of Statutory Auditors, and meet to set audit policies and audit plans, and to decide other matters as prescribed by law, as well as to share audit information among Statutory Auditors. In accordance with the division of duties determined by the Board of Statutory Auditors, the Statutory Auditors attend Board of Directors' meetings, management committee meetings and other important meetings, as well as inspect important documents.
The findings of their audits are reported to the Board of Statutory Auditors. The Statutory Auditors also meet regularly for discussions with directors, the head of the CSR Office and the Accounting Auditors to improve the efficacy of audits performed. Furthermore, strict monitoring is performed through auditing visits at the Group's business locations both in Japan and overseas, with the results reported to the Board of Statuary Auditors.

The Statutory Auditors, the Internal Auditing Group, as well as Accounting Auditors, conduct briefing meetings periodically, as well as when needed for the exchange of information and collaborations.

The Statuary Auditors are responsible for assessing the status of the Company's operations and assets, as well as the execution of other inspection duties. To this end, the Statuary Auditors, in their efforts to carry out effective audits, maintain close contacts with those in charge of monitoring functions within the Internal Auditing Group of the CSR Office and other units involved in internal control systems.

Internal Control System and Compliance System

We have established a "Code of Conduct" that serves as the standard of behavior for employees, as well as "Conduct Guidelines" that provide standards for observing the laws and ordinances of ethics. Furthermore, executives and employees are made thoroughly aware of the spirit of compliance, as well as the importance of compliance by the CEO, as efforts are made to ensure the thorough observance of the laws, ordinances and Articles of Association through the implementation of continuous education and training. As for the internal reporting system, endeavors to substantiate regulations and programs are made to establish a compliance framework by establishing a “Helpline System” that serves as a point of contact for employees to report internal information, as well as to access consultations. A person in charge of J-SOX was appointed in the Internal Audit Department in order to comply appropriately with the Internal Control Report System (J-SOX), based on the Financial Instruments and Exchange Act, while continuously reviewing and improving the company overall to secure the reliability of financial information.

The Company sends its Corporate Officers to Group companies as necessary as directors, in order to facilitate close communication of the Group’s strategies, stay actively involved in important operational decision-making and work to implement effective management processes in general. Moreover, the Company enacted a set of policies such as the Affiliated Company Management Regulations and the Management Guidelines to clarify the duties and authority of each company in the Group. The Company has assigned from among its departments a unit that is principally responsible for overseeing group companies, and works to maintain close sharing of information and remain engaged in management guidance and performance control.

Risk Management System and Related Activities

The corporate group established a “Risk Management Committee” as an organization that reports directly to the President, in order to enhance a comprehensive risk management framework and to promote action. The Committee meets regularly. The Committee is engaged in a variety of activities, including preparation for contingencies through such means as substantiating emergency stockpiles, as well as sharing historical disaster responses and effective training methods to raise the base level of response action for disasters in the corporate group as a whole.

The corporate group has established a “Disaster Countermeasure Manual” and “Business Continuity Plan” (BCP) that stipulate procedures to minimize damage when disasters occur and procedures for restoration, as well as a safety confirmation system for employees to be used in case of an emergency in order to deal with risks that present a significant impact to business continuity, such as earthquakes and fire. The Committee is continuously engaged in activities to increase the responsive capabilities for critical disasters, by conducting periodical training and the like to effectively operate these procedures. An “International Crisis Management Manual” has been formulated for personnel safety management at overseas sites in order to share information and secure a rapid response in emergencies during ordinary times.

Information Security

Information security is an issue that applies to all corporate secrets, including the terms and conditions of contracts with customers, technical information and manufacturing requirements. To strengthen its protection and control of informa-tion assets, Sanken has prepared Information Management Rules that it has fully implemented throughout the entire Group. Moreover, from time to time the Company prepared manuals defining the scope of information that must be pro-tected, as well as control procedures, in accordance with the Act on the Protec-tion of Personal Information and Unfair Competition Prevention Act.

Information security education is taught periodically at the respective depart-ments. The status of implementation for education and information manage-ment procedures is being monitored by the CSR Office as well, the results of which are used for enhancing the information management framework of the respective departments.

Preventive measures against unauthorized access have been enhanced for the communication network connected to external networks, while communication records are protected and monitored with the formulation of guidelines for the use of networks, utilizing measures that have been implemented to secure their effectiveness.

Introduction of External Directors and External Auditors

External Director **Richard R. Lury**	Mr. Lury has been a partner at a law firm in the United States for many years, with experience and knowledge in international corporate law. We consider him to be a good source of valuable advice and suggestions from the perspective of promoting global management. We also believe that he will be able to significantly contribute to enhancing the supervisory functions of our board of directors, by monitoring the corporate management from the objective viewpoint of an attorney, as well as an individual with an independent standpoint.
External Director **Noriharu Fujita**	Mr. Fujita is a certified public accountant in Japan, as well as in the United States. He has many years of auditing experience and possesses considerable knowledge relating to financial affairs and accounting. He also has plenty of international experience, including working as a partner at an auditing corpo-ration in the United States. We believe he will be a good source of valuable advice and suggestions from the perspective of promoting global management. We also believe that he will be able to significantly contribute to enhancing the supervisory functions of our board of directors, by monitoring the corporate management from the objective viewpoint of a certified public accountant, as well as an individual with an independent standpoint.
External Auditor **Mikihiko Wada**	Mr. Wada has copious amounts of experience and a broad knowledge as a corporate manager. He spent many years working at a financial institution and possesses extensive knowledge in financial affairs and accounting, based on practical experiences. We believe he is a suitable person to fill the role of an external auditor from an independent standpoint, with a broad and specialized perspective.
External Auditor **Atsushi Minami**	Mr. Minami has the specialized knowledge and experience of an attorney and patent attorney. We believe he is capable of carrying out his duties as an external auditor from the independent standpoint of a law specialist, securing the validity of audits.

3 Created Work Environment

At Sanken, we hold as our management philosophy “respect each and every employee, while interacting with all employees fairly”. With this concept as our foundation we are making a concerted effort to create the opportunities necessary to develop the capabilities of our employees, while creating a work environment that is safe and easy to work in.

Work-life Balance

Our company emphasizes harmony, between work and home for our employees, while we continue improving work environments and a substantiate framework for support.

- **“Enterprise applying diverse working styles” (Gold Prize)**
  In July of 2012 we were awarded a Gold accreditation by the “Womenomics Project”, which is sponsored by Saitama Prefecture, for our endeavors in creating work environments wherein women are able to remain active in their working activities, while maintaining a balance between work and child care.
- **“Kurumin Mark”**
  In July 2009 we were awarded the “Kurumin Mark” accreditation. We are proactive with the promotion of our employees taking child care leave, not just our female employees but also our male employees, as well as our implementation of employee enlightenment activities regarding participation in child care.

Promotion of active involvement by women

The Sanken Group is implementing a Positive Action Program to promote active involvement by women in the medium to long term, consequentially enrolling approximately 80 individuals in the program since FY2012 (constituting the 1st to the 4th enrollment groups). This program not only involves the superiors of members, who provide on-the-job training (OJT), but also lectures are given by external female managers to provide opportunities for growth, along with seminars on “Logical Thinking”, “Power to Promote Involvement” and other activities to improve the environment with active involvement by women.

Work style reforms

On April 1, 2018 we established the new “Work Style Reform Promotion Headquarters”, based on our clear and emphasized top executive policy, “resolving management issues and achieving joy and happiness for working people”. We consider as our mission the creation of a structure with a virtuous cycle, to ensure that the company continues a strong and sound enterprise that is driven by healthy employees who trust each other, as we aim to achieve the three objectives, ”mindful innovations”, “operational reforms” and “system reforms”.

Diversity

Our company recruits a diverse range of personnel, not only people with disabilities but we also proactively seek foreign nationals in response to the globalization of our business operations, along with others.

We also participate in overseas internship projects, sponsored by Saitama Prefecture, as well as provide internship opportunities (short to long term) through collaborations between universities, offering students an opportunity to deepen their knowledge about the working society.

Safety and Security of Work Places

The Health and Safety Committee holds a scheduled meeting each month at the respective business establishments to promote activities for the safety and the security of work places. A quarterly meeting of the Central Health and Safety Committee is convened as a corporate program to implement a variety of activities in association with individual business establishments.

Principal activities in FY2017

- Professionals provide a “Chemical Handling Lecture” and “High Pressure Gas Safety Lecture”.
- Company-wide verification of methods used for handling chemicals.
- Forklift lecture provided.
- “Disaster Prevention and Evacuation Training”.
- “Regular Life Saving Lecture” provided by firefighters.
- “Traffic Safety Lecture”.
- Installation of “Drive Recorders” on all corporate vehicles.
- Total smoking ban for all sales offices in Japan.

4 Contributions to Local Communities

Sanken considers the revitalization of local communities leads to the securing of personnel for our corporate group, while enhancing a variety of infrastructure. Based on this concept we contribute with activities to improve our local communities. A major characteristic of community activities contributed by Sanken, includes the utilization of products and technologies developed and manufactured by Sanken.

Environmental classes for elementary and junior high school students around the country

The LED panel that has a solar power generation panel, referred to as “Petbotaru®”, utilizes LED products and the circuit technology of our proprietary developments. Our corporate group provides “Energy Saving Environmental Classes” and “Workshops” that utilize this “Petbotaru®” and our other semiconductor products, LED products, as well as various technologies, at different locations throughout Japan. Workshop sessions, held during FY2017, featured the following:

Petbotaru®

Resona Kids Money Academy

Environment Class (Nobitome Elementary School, Shinza City)

Description	Date held
“Resona Kids Money Academy” A CSR collaboration project with Saitama Resona Bank. We provided sessions for “Ecological Energy Conservation” and an “LED workshop”.	August 29, 2017
“Environment Class” (Nobitome Elementary School, Shinza City) Lessons on the environment and LEDs, as well as a workshop of LED “Petbotaru®”, were conducted.	June 16, 2017
“Summer Vacation LED Experiential Classes for Parents and Children” (Civic Center) This collaborative program was attended by students of a local technical high school (held 8 times). Parents and children took part in a serious attempt to create LEDs (first such attempt).	July 22, 2017
“18th Elementary School Students Craftsmanship Class” (Machino Plant of Ishikawa Sanken) A workshop for building an LED light (with security buzzer) was conducted for 5th and 6th grade students of local elementary schools.	August 18, 2017
“LED ‘Petbotaru®’ Class for Wajima City Elementary School Students” LED “Petbotaru®”, were utilized for illumination in the event to light up “Shiroyone Senmaida” rice terraces, which comprise a tourist site, fabricated by local elementary school students.	September 7 to 28, 2017
Exhibits at the “Youngsters’ Science Festival” Kashima Sanken participated for the first time, in the event sponsored by Kamisu City Board of Education. Ecology classes on energy conservation and LED “Petbotaru®” workshops were provided.	November 26, 2017
Cooperation in “Ecology Survey” (Tohoku Elementary School of Niiza City) We provided cooperation for the “Ecology Survey” that was carried out by 5th grade students of this elementary school, as a part of their class work and we provided observation tours at our Head Office, as well as LED workshops.	March 14 and 16, 2018
[Overseas implementations] “Children’s Workshops” provided in developing countries (Micronesia) We provided cooperation to the Japan International Cooperation Agency (JICA) by delivering an LED “Petbotaru®” workshop at the U Church on Pompeii Island of Micronesia.	April 20, 2018

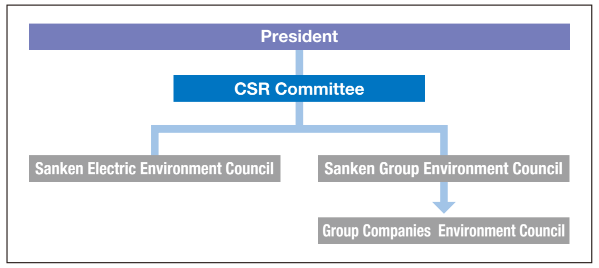
5 Environmental Initiatives

Sanken and its Group companies have placed as a critical part of our CSR ac-tivities the basic philosophy of a union between business and environmental activities. Accordingly, we are promoting environmental activities with the catch phrase, “Contributing to Global Environment with Cutting Edge Eco-friendly and Energy Saving Products.”

The Sanken Group Environmental Charter and Action Plan

Together with introducing an environmental management system (EMS) in fis-cal 1998, Sanken Electric enacted The SG Environmental Charter in 2000 as an environmental vision for the Sanken Group, and has pledged to act in an envi-ronmentally friendly manner, with sincerity and ingenuity, in every aspect of its corporate activities. In addition, the Company formulates and implements an SG Environmental Action Plan each year as its specific program for action. Each Group company also establishes an Environmental Policy and undertakes on-going measures to reduce its negative environmental impact, while taking into consideration its business attributes and regional characteristics.

Environmental Management Organization



To efficiently and accurately promote environmental management, Sanken has established a CSR Committee as a parent entity reporting directly to the Company’s president, and created a Groupwide, cross-functional environmental protection organization.

Sanken currently has established environmental management systems for its production bases at domestic and overseas manufacturing sites, all of which have obtained ISO14001 certification. Actions are currently being taken sys-tematically toward the acquisition of the new ISO14001 certification (2015 ver-sion) and sequential acquisition of certifications at sites is planned to start from January 2017.

Sanken Electric Headquarters, Kawagoe Plant and Niiza Plant were certified for the 2015 version of the ISO14001 standard in March 2017, as the leadoff candidates from the domestic companies of the Sanken Group.

Environmental audits and periodical screening

To improve its environmental activities, the Company conducts its own environmental audit annually to determine, for example, whether it is in compliance with all relevant regulations and has made sufficient progress on its yearly plan. In addition, annual inspections by third-party organizations are conducted each year to verify the effectiveness of the Company’s environmental management system.

Compliance with laws and regulations

We take on board the provisions under environment-related laws and regulations and periodically verify our compliance status with such laws and regulations. To ensure we comply with the laws and regulations we established voluntary control values relating to the emissions of gas, effluent, noise, vibration and the like, at each of our locations and these are stricter than the regulatory values set forth by the laws and ordinances.

Appropriate management of chemical substances

Our company established the “Chemical Management Manual” to comply with the laws and ordinances, conserve the global environment, prevent accidents, manage the workplace safety and health, as well as product safety, while undertaking every effort to manage chemical substances in an appropriate manner. Furthermore, periodical patrols are carried out at locations where chemicals are used and stored, to reduce the risks associated with chemical substances.

Energy Conservation Promotion Council and responsive action implemented to comply with Energy Conservation Law and Act on Promotion of Global Warming Countermeasures

We recognize the importance of reducing the emission of carbon dioxide, a greenhouse gas, with the “Energy Conservation Promotion Council” as the foundation, consequently we have been implementing various energy conservation measures. We conduct periodical patrols at work places to verify the operational status and extract aspects for improvement.

Furthermore, we appointed an Energy Administrator, according to the “Energy Conservation Law” and the “Act on Promotion of Global Warming Countermeasures”. All business locations subject to performance reporting obligations have been submitting medium to long-term plans, as well as periodical reports to competent authorities.

Green Procurement

Our company includes green procurements as a part of our global environment conservation program. We organized “Green Procurement Guidelines” and the "Product Hazardous Substance Content Standard” in 2003 and have since been taking proactive action, including revising the Green Procurement Standard to conform with social conditions.

Environmentally Friendly Products

Most of the products we develop are intended for fields that can be described with the keywords “Eco-friendly and Energy Saving” and can be characterized as environmentally friendly products. For instance in recent years products that comply with the “Euro6” standard, an exhaust gas emissions regulation in Europe, have been developed for our core market, the automotive industry. New IC packages have been developed for air conditioning systems in hybrid and electric cars, while products that comply with the “Top Runner Standards” have been developed as the needs arise, primarily for white goods in motor-related markets as our ongoing contribution to environmental measures.

Financial Highlights

Sanken Electric Co., Ltd. and Consolidated Subsidiaries
Years ended March 31, 2018, 2017, 2016, 2015, 2014 and 2013

	Millions of yen					
	2018	2017	2016	2015	2014	2013
Statements of income						
Net sales	¥ 175,209	¥ 158,772	¥ 155,919	¥ 160,724	¥ 144,467	¥ 126,386
Cost of sales	126,840	117,869	115,113	116,834	108,656	98,211
Gross profit	48,369	40,902	40,806	43,889	35,810	28,174
Selling, general and administrative expenses	36,342	34,972	34,003	32,689	28,033	23,549
Operating income (loss)	12,026	5,930	6,803	11,199	7,777	4,625
Other income (expenses), net	(18,531)	(1,347)	(4,734)	375	(2,308)	(526)
Profit before income taxes	(6,505)	4,582	2,068	11,575	5,468	4,099
Profit attributable to owners of parent	(11,421)	1,739	171	7,942	5,029	2,272
Balance sheets						
Total current assets	¥ 111,83	¥ 112,415	¥ 112,204	¥ 116,183	¥ 100,764	¥ 92,077
Total investments and long-term receivables	4,759	4,725	4,820	5,317	5,404	3,803
Property, plant and equipment, net	63,968	60,204	62,015	65,795	54,975	50,945
Other assets	5,114	5,355	5,671	5,971	3,618	1,691
Total assets	185,675	182,700	184,711	193,267	164,762	148,517
Total current liabilities	69,978	75,967	79,499	87,353	71,376	76,948
Total long-term liabilities	43,414	51,995	51,252	42,892	44,277	32,132
Total net assets	72,283	54,736	53,959	63,021	49,108	39,436
Total liabilities and net assets	185,675	182,700	184,711	193,267	164,762	148,517
	%					
Financial indicators						
Return on assets	6.4	2.7	2.0	5.8	4.8	2.8
Return on equity	(20.8)	3.2	0.3	14.3	11.4	6.3
Return on sales	(6.52)	1.10	0.11	4.94	3.48	1.80
Equity ratio	29.8	29.8	29.0	32.4	29.6	26.4
Current ratio	159.8	148.0	141.1	133.0	141.2	119.7
	Yen					
Per share						
Total net assets per share	¥ 456.66	¥ 448.87	¥ 441.96	¥ 516.22	¥ 401.75	¥ 322.92
Net income (loss) per share	(94.24)	14.35	1.41	65.50	41.47	18.73
Cash dividends per share	6.00	3.50	3.50	6.50	6.00	6.00

Financial Sectoin

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Management's Discussion and Analysis

Sanken Electric Co., Ltd. and Consolidated Subsidiaries
Years ended March 31, 2018 and 2017

OVERVIEW

Management Strategy

Our corporate group continues to advance the globalization of business operations by implementing proprietary technologies, while striving to achieve innovations with our technological and creative capabilities in our core business of semiconductors, according to our "Management Philosophy," which states our mission of providing optimum solutions for power electronics and peripheral domains. We are also striving to secure a strong management base to maximize the value of the corporate group through steady endeavors in response to the needs of society, while attaining harmony with the environment.

We formulated a medium-term management plan, spanning three years from the fiscal term ending in March 2016 to the fiscal term ending in March 2018, as our medium to long-term management strategy. During the final fiscal year of this medium-term management plan (ending March 2018) we continued to strive, as a whole corporate group, to increase the sales of new products in the "eco-friendly and energy-saving" market, in an attempt to realize two basic policies, "our commitment to growth markets" and "the enhancement of the financial constitution". We also started major business structural reforms by securing funds through the third-party allocation of our consolidated affiliate Sanken North America, Inc. (presently Allegro MicroSystems, Inc.). This business structural reform was aimed at improving the corporate value, over the medium to long term, by advocating an enhanced corporate culture and accelerating the implementation of a growth strategy. More specifically, we endeavored to withdraw from the power module business, stepping back from the non-strategic markets of our semiconductor devices business, along with the disposal of associated inventory assets, thereby reducing fixed expenses by optimizing the scale of personnel at Headquarters, as well as by implementing promotional measures for the growth strategies of our subsidiary in North America, which takes a dominant role in our consolidated business performance.

Fund procurement and liquidity (financial policy)

The means used to procure funds for the corporate group include the issuing of corporate bonds and commercial papers, as well as the signing of committed lines of credit and bank loans. The balance of accounts, as of March 31, 2018, was ¥13.839 billion for short-term loans, which includes long-term loans for which repayment is scheduled to occur within one year, ¥7 billion for commercial papers, ¥40 billion for corporate bonds, including those scheduled for repayment within one year and ¥11.475 billion for long-term loans. Funds for the working capital and capital investments were basically procured from internal resources, however it was considered possible to procure the funds necessary for the working capital and capital investments, required to sustain the growth of the corporate group, from a capacity to create cashflow through sales activities, as well as from ¥23 billion for unused commercial paper issuance facilities, ¥20.3 billion of unused overdrafts and about ¥12.6 billion in committed lines of credit.

Dividend Policy

The Company regards the returning of profits to shareholders as the policy for distributing profits and identifies this as one of the most important management priorities. It is therefore the basic concept of the corporate group to improve the earning capabilities and financial structure through the proactive implementation of business operations, to retain a minimally required amount internally, while providing stable and steady distributions.

As a basic policy the distribution of the capital surplus to shareholders is completed twice each year as interim and year-end dividends. The decision-making bodies for the dividends involve the Board of Directors for the interim dividends and the General Meeting of Shareholders for the year-end dividends.

With regards to dividends for the current term, a decision was made to distribute the dividends of ¥6 per share (of which ¥3 is the interim dividend), after securing funds for growth strategies needed to achieve the new medium-term management plan.

RESULTS OF OPERATIONS

Summary

A steady transition occurred in the electronics industry, to which our corporate group belongs, despite a decline in the business performance for the AV and OA markets, due to an increase in facility investments, which led to a favorable trend in the industrial machinery market, as well as the white goods market, where energy saving measures continued to be implemented. The automotive market also showed a steady tendency, due to further electrifications and the popularization of environmentally friendly vehicles. The demand for power semiconductors increased on a global scale, against the backdrop of such occurrences.

Under such an environment our corporate group implemented business structural reforms, intended to improve corporate value over the medium to long period. This led to extraordinary losses that resulted in a net loss for the current term, however, the operating profit significantly improved over the performance of the previous term, due to the effects from increased sales and structural reforms. The net profit to net worth ratio (ROE), without taking into consideration the extraordinary losses arising from structural reforms, reached a level that exceeded 10%, while improvements were also made with the financial structure. What this means is that the outcome of our structural reforms definitely became evident from the very first year of implementation and will lead to the achievement of a growth strategy in the future, now recognized as essential management measures requiring implementation.

The consolidated business performance for the current term ended with net sales of ¥175.209 billion yen, a 10.4% increase over the previous term.

As for profits, the operating profit was ¥12.026 billion, a reduction of 102.8% from the previous term. The loss attributable to the owners of the parent company was ¥11.421 billion (net profit was ¥1.739 billion during the previous term).

Results of Operations by Business Segment

The business categories of our Power Module business and Power System business were integrated into a single business category, the Power System business, starting this term, with the reporting segments also changed to two segments, "Semiconductor Devices business" and "Power system business". The business performance for the respective segments below represent comparisons derived by converting the figures from the previous term into the classifications of segments following the changes.

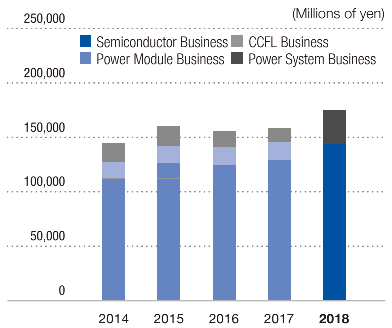
Semiconductor Devices Business

The net sales for this business was ¥143.836 billion, an increase of ¥14.513 billion (11.2%) over the previous term.

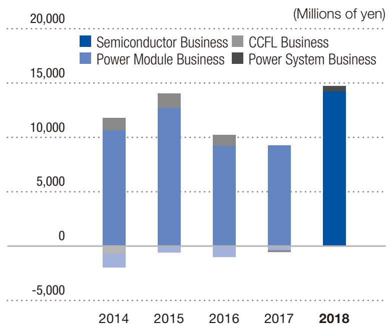
Power System Business

The net sales for this business was ¥31,373 billion, an increase of ¥1.923 billion (6.5%) over the previous term.

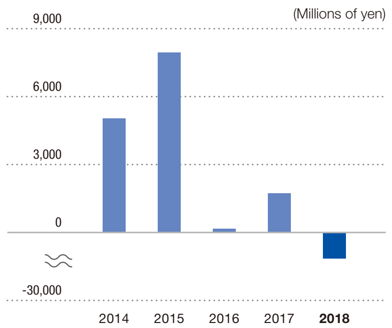
Net Sales
Years ended March 31



Operating Income
Years ended March 31



Net Income
Years ended March 31



Extraordinary loss

Business structural reforms were implemented during the current term as described above, which resulted in the restructuring costs of ¥18.315 billion, a loss for the liquidation of subsidiaries of ¥364 million and special retirement expenses of ¥190 million.

FINANCIAL POSITION

Total Assets

The total assets for the current term were ¥185.675 billion, an increase of ¥2.975 billion over the previous term. The current assets are ¥111.833 billion, a reduction of ¥582 million, compared to the previous term. This was primarily due to an increase in the cash and deposits of ¥10,203 billion, while inventories dropped by ¥13.534 billion. The net property, plants and equipment increased by ¥3.764 billion over the end of the previous term to reach ¥63.968 billion. This was due primarily to an increase in land, machinery and equipment. Investments and long-term receivables increased by ¥34 million over the end of the previous term, to reach ¥4.759 billion.

Liabilities

The current liabilities at the end of the current term were ¥69.978 billion, a reduction by ¥5.989 billion, compared to the end of the previous term. This was due primarily to an increase in the current portion of bonds of ¥15 billion, while the short-term bank loans dropped by ¥9.812 billion and the current portion of long-term debt dropped by ¥7 billion, as commercial papers dropped by ¥8 billion.

The long-term liabilities, as of the end of the current term, were ¥43.414 billion, a reduction of ¥8.581 billion, compared to the end of the previous term. This was due primarily to an increase in the long-term debt of ¥6.475 billion, while the bonds payable decreased by ¥15 billion.

Net Assets

The net assets as of the end of the current term increased by ¥17.546 billion, in comparison to the end of the previous term, to reach ¥72.283 billion. The total shareholders' equity increased by ¥3.475 billion, over the end of the previous term, reaching ¥59.846 billion. These were due to an increase in the capital surplus of ¥15.702 billion and a reduction in the retained earnings of ¥12.212 billion. Furthermore, the equity ratio at the end of the current term was 29.8%, which was the same as at the end of the previous term.

Cash Flows

The fund status of our corporate group, in terms of "cashflow from operating activities" was a revenue of ¥14.521 billion (reduction in revenue of ¥4.716 billion, compared with the previous term), due to a decrease in the income before income taxes and minority interests, as well as increased outlays, due to payments made for restructuring costs. In terms of "cashflow from investment activities" there was an outlay of ¥16.644 billion (increased outlay of ¥413 million compared to the previous term), due to the purchase of properties, plants and equipment. In terms of "cashflow for financial activities" there was a revenue of ¥13.233 billion (increase in revenue of ¥16.594 billion, compared to the previous term), due in part to increases in revenue, such as the payment of proceeds from share issuances to non-controlling shareholders. These resulted in the balance of cash and cash equivalents of ¥32.593 billion, an increase of ¥10.355 billion over the end of the previous term.

Capital Expenditures

The amount of capital investment for the current term by the corporate group was ¥16.571 billion, with the principal investments made to purchase production facilities, as well as test and research facilities.

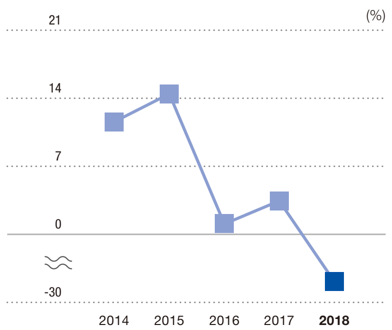
In terms of the semiconductor devices business, the amount of ¥593 million was spent on the purchase of production facilities, as well as test and research facilities for semiconductor devices at Headquarters, while the capital investment of ¥15.370 billion was made for production facility enhancements at the consolidated subsidiaries of Ishikawa Sanken Co., Ltd., Yamagata Sanken Co., Ltd., Fukushima Sanken Co., Ltd., Dalian Sanken Electric Co., Ltd., Allegro MicroSystems, LLC and Polar Semiconductor, LLC.

In the Power System business, a capital expenditure of ¥124 million was made for such items as product molds, while consolidated subsidiaries, including P.T. Sanken Indonesia, made a capital expenditure of ¥103 million for production facilities, as well as for the purchase of molds and the like.

Funds for capital expenditure have been provided principally from internal funds and loans.

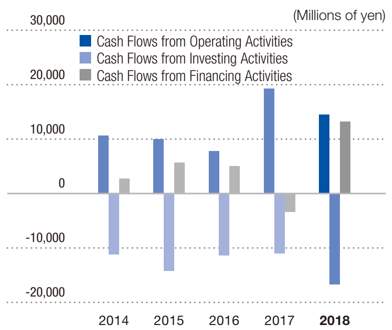
Return on Equity

Years ended March 31



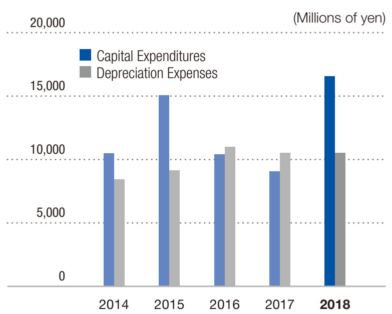
Cash Flows

Years ended March 31



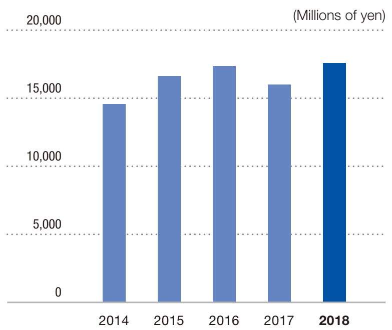
Capital Expenditures/ Depreciation Expenses

Years ended March 31



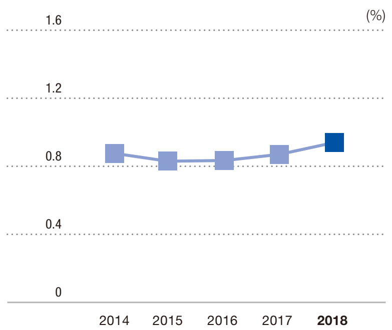
R&D Expenses

Years ended March 31



Asset Turnover

Years ended March 31



Consolidated Balance Sheets

Sanken Electric Co., Ltd. and Consolidated Subsidiaries

Assets	As of March 31, 2018 (Millions of yen)	2017 (Millions of yen)	2018 (Thousands of U.S. dollars) (Note 3)
Current assets:			
Cash and deposits (Notes 4 and 6)	¥ 32,752	¥ 22,548	$ 308,080
Notes and accounts receivable - trade (Notes 5 and 6)	34,656	33,867	325,993
Less allowance for doubtful receivables	(58)	(299)	(550)
Inventories (Note 9)	37,631	51,165	353,978
Deferred tax assets (Note 19)	1,207	2,080	11,358
Other current assets	5,644	3,051	53,093
Total current assets	111,833	112,415	1,051,954
Non-current assets:			
Property, plant and equipment (Note 10):			
Land	5,712	5,004	53,737
Buildings and structures, net	20,833	21,643	195,969
Machinery, equipment and vehicles, net	30,690	27,341	288,685
Tools, furniture and fixtures, net	1,427	1,024	13,429
Leased assets, net	503	447	4,738
Construction in progress	4,800	4,743	45,154
Total property, plant and equipment	63,968	60,204	601,715
Intangible assets:			
Software	2,936	3,298	27,623
Other	2,177	2,057	20,485
Total intangible assets	5,114	5,355	48,109
Investments and long-term receivables:			
Investments in other securities (Notes 6 and 7)	1,407	1,457	13,240
Deferred tax assets (Note 18)	411	204	3,870
Assets for retirement benefits (Note 17)	399	—	3,760
Other long-term receivables	2,782	3,304	26,177
Less allowance for doubtful receivables	(242)	(242)	(2,276)
Total investments and long-term receivables	4,759	4,725	44,772
Total assets	¥ 185,675	¥ 182,700	$ 1,746,552

Liabilities and net assets	As of March 31, 2018 (Millions of yen)	2017 (Millions of yen)	2018 (Thousands of U.S. dollars) (Note 3)
Current liabilities:			
Short-term bank loans (Notes 6 and 11)	¥ 13,339	¥ 23,151	$ 125,480
Current portion of long-term debt (Notes 6 and 11)	500	7,500	4,703
Current portion of bonds	15,000	—	141,096
Commercial paper (Notes 6 and 11)	7,000	15,000	65,845
Notes and accounts payable (Note 6):	20,634	18,391	194,102
Accrued expenses	11,337	9,441	106,648
Lease obligations	87	220	826
Income taxes payable	412	492	3,884
Deferred tax liabilities (Note 18)	294	—	2,770
Other current liabilities	1,370	1,770	12,888
Total current liabilities	69,978	75,967	658,246
Long-term liabilities:			
Bonds payable (Notes 6 and 11)	25,000	40,000	235,161
Long-term debt (Notes 6 and 11)	11,475	5,000	107,939
Lease obligations	67	156	635
Accrued retirement benefits for directors	25	25	237
Liabilities for retirement benefits (Note 17)	2,632	2,627	24,765
Deferred tax liabilities (Note 18)	1,818	2,178	17,106
Other long-term liabilities	2,395	2,009	22,531
Total long-term liabilities	43,414	51,995	408,376
Net assets (Note 19):			
Shareholders' equity:			
Common stock:			
Authorized – 257,000,000 shares			
Issued and outstanding: 2018 – 125,490,302 shares	20,896	20,896	196,564
2017 – 125,490,302 shares	—	—	—
Capital surplus	26,003	10,301	244,597
Retained earnings	16,964	29,176	159,575
Less treasury stock, at cost: 4,315,618 shares in 2018 and 4,293,460 shares in 2017	(4,017)	(4,003)	(37,791)
Total shareholders' equity (Note 23)	59,846	56,371	562,946
Accumulated other comprehensive income:			
Unrealized holding gain (loss) on securities	390	425	3,669
Translation adjustments	(909)	754	(8,552)
Retirement benefit liability adjustments	(3,991)	(3,150)	(37,548)
Total accumulated other comprehensive income (loss)	(4,510)	(1,970)	(42,430)
Non-controlling interests	16,947	335	159,413
Total net assets	72,283	54,736	679,928
Total liabilities and net assets	¥ 185,675	¥ 182,700	$ 1,746,552

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Operations

Sanken Electric Co., Ltd. and Consolidated Subsidiaries

	For the year ended March 31,		
	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars) (Note 3)
Net sales	¥ 175,209	¥ 158,772	$ 1,648,102
Cost of sales (Notes 17, 20 and 22)	126,840	117,869	1,193,116
Gross profit	48,369	40,902	454,986
Selling, general and administrative expenses (Notes 13, 17, 20 and 22)	36,342	34,972	341,855
Operating income	12,026	5,930	113,130
Other income (expenses):			
Interest expense	(612)	(716)	(5,762)
Interest income	80	26	760
Dividend income	39	36	373
Subsidy income	207	162	1,951
Foreign exchange gains (losses)	719	(14)	6,764
Gain on sales of scraps	91	84	860
Product warranting costs	(102)	(83)	(960)
Gain on sales of fixed assets	—	0	—
Loss on sales of fixed assets	(0)	(4)	(7)
Loss on disposal of fixed assets (Note 14)	(97)	(440)	(913)
Gain on abolishment of retirement benefit plan	69	—	654
Compensation income	585	—	5,507
Special retirement expenses	(190)	—	(1,796)
Loss on liquidation of subsidiaries	(364)	—	(3,431)
Restructuring cost (Note 15)	(18,315)	—	(172,280)
Other income	324	387	3,055
Other expenses	(967)	(787)	(9,096)
	(18,531)	(1,347)	(174,319)
Profit (loss) before income taxes	(6,505)	4,582	(61,189)
Income taxes (Note 18):			
Current	3,496	4,062	32,892
Deferred	470	(1,196)	4,424
Profit (loss)	(10,472)	1,716	(98,506)
Profit (loss) attributable to non-controlling interests	948	(22)	8,926
Profit (loss) attributable to owners of Parent (Note 23)	¥ (11,421)	¥ 1,739	$ (107,433)

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Comprehensive Income (Loss)

Sanken Electric Co., Ltd. and Consolidated Subsidiaries

	For the year ended March 31,		
	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars) (Note 3)
Profit (loss)	¥ (10,472)	¥ 1,716	$ (98,506)
Other comprehensive income (loss):			
Unrealized holding gain (loss) on securities	(35)	175	(331)
Translation adjustments	(2,557)	(960)	(24,053)
Retirement benefit liability adjustments	(870)	(142)	(8,190)
Total other comprehensive income (loss) (Note 16)	(3,463)	(927)	(32,574)
Comprehensive income (loss)	¥ (13,935)	¥ 788	$ (131,081)
Breakdown:			
Comprehensive income (loss) attributable to :			
Owners of Parent	¥ (13,961)	¥ 837	$ (131,330)
Non-controlling interests	26	(48)	249

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Changes in Net Assets

Sanken Electric Co., Ltd. and Consolidated Subsidiaries

	For the year ended March 31, 2018				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity
	(Millions of yen)				
Balance at April 1, 2017	¥ 20,896	¥ 10,301	¥ 29,176	¥ (4,003)	¥ 56,371
Changes during the year					
Cash dividends paid (other capital surplus)			(790)		(790)
Profit (loss) attributable to owners of Parent			(11,421)		(11,421)
Acquisition of treasury stock				(14)	(14)
Issue of share capital by the Company's consolidated subsidaiaries		15,619			15,619
Share based payments		82			82
Net changes in items other than shareholders' equity					—
Total changes during the year	—	15,702	(12,212)	(14)	3,475
Balance at March 31, 2018	¥ 20,896	¥ 26,003	¥ 16,964	¥ (4,017)	¥ 59,846

	For the year ended March 31, 2018				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity
	(Thousands of U.S. dollars) (Note 3)				
Balance at April 1, 2017	$ 196,564	$ 96,896	$ 274,448	$ (37,656)	$ 530,254
Changes during the year					
Cash dividends paid (other capital surplus)			(7,440)		(7,440)
Profit (loss) attributable to owners of Parent			(107,433)		(107,433)
Acquisition of treasury stock				(135)	(135)
Issue of share capital by the Company's consolidated subsidaiaries		146,927			146,927
Share based payments		773			773
Net changes in items other than shareholders' equity					—
Total changes during the year	—	147,700	(114,873)	(135)	32,692
Balance at March 31, 2018	$ 196,564	$ 244,597	$ 159,575	$ (37,791)	$ 562,946

	For the year ended March 31, 2018					
	Accumulated other comprehensive income					
	Unrealized holding gain (loss) on securities	Translation adjustments	Retirement benefit liability adjustments	Total accumulated other comprehensive income	Non-controlling interests in consolidated subsidiaries	Total net assets
	(Millions of yen)					
Balance at April 1, 2017	¥ 425	¥ 754	¥ (3,150)	¥ (1,970)	¥ 335	¥ 54,736
Changes during the year						
Cash dividends paid (other capital surplus)				—		(790)
Profit (loss) attributable to owners of Parent				—		(11,421)
Acquisition of treasury stock				—		(14)
Issue of share capital by the Company's consolidated subsidaiaries				—	16,143	31,763
Share based payments				—		82
Net changes in items other than shareholders' equity	(35)	(1,663)	(841)	(2,540)	467	(2,072)
Total changes during the year	(35)	(1,663)	(841)	(2,540)	16,611	17,546
Balance at March 31, 2018	¥ 390	¥ (909)	¥ (3,991)	¥ (4,510)	¥ 16,947	¥ 72,283

	For the year ended March 31, 2018					
	Accumulated other comprehensive income					
	Unrealized holding gain (loss) on securities	Translation adjustments	Retirement benefit liability adjustments	Total accumulated other comprehensive income	Non-controlling interests in consolidated subsidiaries	Total net assets
	(Thousands of U.S. dollars) (Note 3)					
Balance at April 1, 2017	$ 4,000	$ 7,097	$ (29,631)	$ (18,533)	$ 3,158	$ 514,879
Changes during the year						
Cash dividends paid (other capital surplus)				—		(7,440)
Profit (loss) attributable to owners of Parent				—		(107,433)
Acquisition of treasury stock				—		(135)
Issue of share capital by the Company's consolidated subsidaiaries				—	151,853	298,780
Share based payments				—		773
Net changes in items other than shareholders' equity	(331)	(15,649)	(7,916)	(23,897)	4,401	(19,496)
Total changes during the year	(331)	(15,649)	(7,916)	(23,897)	156,254	165,049
Balance at March 31, 2018	$ 3,669	$ (8,552)	$ (37,548)	$ (42,430)	$ 159,413	$ 679,928

	For the year ended March 31, 2017				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity
	(Millions of yen)				
Balance at April 1, 2016	¥ 20,896	¥ 10,301	¥ 27,437	¥ (3,994)	¥ 54,641
Changes during the year					
Cash dividends paid (other capital surplus)					—
Profit (loss) attributable to owners of Parent			1,739		1,739
Acquisition of treasury stock				(9)	(9)
Disposition of treasury stock					—
Net changes in items other than shareholders' equity					—
Total changes during the year	—	—	1,739	(9)	1,730
Balance at March 31, 2017	¥ 20,896	¥ 10,301	¥ 29,176	¥ (4,003)	¥ 56,371

	For the year ended March 31, 2017					
	Accumulated other comprehensive income					
	Unrealized holding gain (loss) on securities	Translation adjustments	Retirement benefit liability adjustments	Total accumulated other comprehensive income	Non-controlling interests in consolidated subsidiaries	Total net assets
	(Millions of yen)					
Balance at April 1, 2016	¥ 249	¥ 1,689	¥ (3,007)	¥ (1,068)	¥ 387	¥ 53,959
Changes during the year						
Cash dividends paid (other capital surplus)				—		—
Profit (loss) attributable to owners of Parent				—		1,739
Acquisition of treasury stock				—		(9)
Disposition of treasury stock				—		—
Net changes in items other than shareholders' equity	175	(934)	(142)	(901)	(51)	(953)
Total changes during the year	175	(934)	(142)	(901)	(51)	776
Balance at March 31, 2017	¥ 425	¥ 754	¥ (3,150)	¥ (1,970)	¥ 335	¥ 54,736

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Cash Flows

Sanken Electric Co., Ltd. and Consolidated Subsidiaries

	For the year ended March 31,		
	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars) (Note 3)
Operating activities			
Profit (loss) before income taxes	¥ (6,505)	¥ 4,582	$ (61,189)
Depreciation and amortization	11,068	11,045	104,119
Restructuring cost	18,315	—	172,280
Decrease (increase) in allowance for doubtful receivables	(238)	285	(2,245)
Decrease (increase) in assets for retirement benefits	(666)	981	(6,267)
Increase (decrease) in provision for retirement benefits for employees	(453)	(2,303)	(4,267)
Interest and dividend income	(120)	(63)	(1,133)
Interest expense	612	716	5,762
Loss (gain) on sales of property, plant and equipment	0	3	7
Decrease (increase) in notes and accounts receivable	(1,412)	(43)	(13,286)
Decrease (increase) in inventories	(3,552)	1,243	(33,415)
Increase (decrease) in notes and accounts payable	2,677	2,436	25,187
Other	808	3,777	7,607
Subtotal	20,534	22,662	193,158
Interest and dividends received	115	68	1,089
Interest paid	(603)	(809)	(5,675)
Payments for Restructuring cost	(1,928)	—	(18,144)
Income taxes paid	(3,596)	(2,682)	(33,833)
Net cash provided by operating activities	14,521	19,237	136,594
Investing activities			
Purchases of property, plant and equipment	(15,695)	(9,896)	(147,636)
Proceeds from sales of property, plant and equipment	128	27	1,205
Purchases of intangible assets	(1,142)	(1,030)	(10,744)
Increase in loans receivable	—	(1)	—
Proceeds from loans receivable	2	8	18
Other	63	(38)	593
Net cash used in investing activities	(16,644)	(10,931)	(156,563)
Financing activities			
Increase (decrease) in short-term bank loans	(9,445)	2,572	(88,850)
Increase (decrease) in commercial paper	(8,000)	11,000	(75,251)
Proceeds from long-term loans payable	7,000	—	65,845
Repayment of long-term loans payable	(7,525)	—	(70,783)
Proceeds from issuance of corporate bonds	—	9,950	—
Redemption of corporate bonds	—	(25,900)	—
Repayment of finance lease obligations	(218)	(973)	(2,059)
Proceeds from share issuance to non-controlling shareholders	32,228	—	303,160
Purchase of treasury stock	(14)	(9)	(135)
Cash dividends paid	(787)	(1)	(7,403)
Dividends paid to non-controlling interests	(4)	—	(42)
Net cash (used in) provided by financing activities	13,233	(3,360)	124,479
Effect of exchange rate changes on cash and cash equivalents	(755)	(354)	(7,104)
Net increase in cash and cash equivalents	10,355	4,591	97,405
Cash and cash equivalents at beginning of the year	22,237	17,646	209,179
Cash and cash equivalents at end of the year (Note 4)	¥ 32,593	¥ 22,237	$ 306,584

The accompanying notes are an integral part of the consolidated financial statements.

Notes to Consolidated Financial Statements

Sanken Electric Co., Ltd. and Consolidated Subsidiaries
March 31, 2018

1. Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying consolidated financial statements of Sanken Electric Co., Ltd. (the "Company") and consolidated subsidiaries (collectively, the "Group") have been prepared in accordance with accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards, and are compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Law of Japan.

The accompanying consolidated financial statements for the year ended March 31, 2018 have been prepared by using the accounts of foreign consolidated subsidiaries prepared in accordance with either International Financial Reporting Standards (IFRS) or accounting principles generally accepted in the United States as adjusted for certain items including goodwill, actuarial differences and capitalized development costs.

As permitted by the Financial Instruments and Exchange Law, amounts of less than one million yen have been omitted. As a result, the totals shown in the accompanying consolidated financial statements (both in yen and in U.S. dollars) do not necessarily agree with the sums of the individual amounts.

(b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and all its subsidiaries. As of March 31, 2018, the number of consolidated subsidiaries was 36 (34 in 2017). Significant intercompany transactions and account balances have been eliminated in consolidation. Generally, the differences, if significant in amounts, between the cost and the equity in the underlying net assets at fair value of consolidated subsidiaries at the date acquired are capitalized in the year of acquisition and amortized principally over a five-year period.

(c) Securities

The accounting standard for financial instruments requires that securities be classified into three categories: trading, held-to-maturity or other securities. Trading securities are carried at fair value and held-to-maturity securities are carried at amortized cost. Marketable securities classified as other securities are carried at fair market value with any changes in unrealized gain or loss, net of the applicable income taxes, included directly in net assets. Non-marketable securities classified as other securities are carried at cost. The cost of securities sold is determined by the moving average method.

(d) Inventories

Inventories held for sale in the ordinary course of business are stated at cost using the moving-average method. The carrying amounts in the accompanying consolidated balance sheets are written down to reflect any decreased profitability.

(e) Property, Plant and Equipment; Intangible Assets; Leased Assets; and Depreciation and Amortization

Property, plant and equipment are recorded at cost. Depreciation at the Company and its subsidiaries is computed principally by the straight-line method over the estimated useful lives of the respective assets. The estimated useful lives are as follows:

Buildings	8 – 60 years
Machinery and equipment	3 – 12 years

Intangible assets are amortized over a period of 5 or 10 years by the straight-line method.

Leased assets under finance lease transactions that stipulate the transfer of ownership of the leased assets to the lessee are depreciated principally over the estimated useful lives of similar-owned assets by the straight-line method.

Leased assets under finance lease transactions that do not stipulate the transfer of ownership of the leased assets to the lessee are depreciated over their lease periods by the straight-line method with a residual value of zero.

(f) Allowance for Doubtful Receivables

Estimated uncollectible amounts are calculated using historical data for trade receivables and individually considering the probability of collection of doubtful receivables.

(g) Bond Issuance Costs

Bond issuance costs are charged to income when incurred.

(h) Employees' Retirement Benefits

The retirement benefit obligation for employees is attributed to each period by the benefit formula method.

Prior service cost is amortized from the year in which the gain or loss is recognized primarily by the declining-balance method over various periods (principally 10 through 20 years) which are shorter than the average remaining years of service of the employees.

Net unrecognized actuarial gain or loss is amortized from the year following the year in which the gain or loss is recognized primarily by the declining-balance method over various periods (principally 10 through 18 years) which are shorter than the average remaining years of service of the employees.

Certain consolidated subsidiary uses a simplified method for calculating retirement benefit expenses and liabilities based on the assumption that the benefits payable approximates the retirement benefit obligation at year-end.

(i) Retirement Benefits for Directors

To prepare for the payment of retirement benefits to directors and corporate auditors, a reserve for retirement benefits has been provided at the estimated amounts required at the year-end based on the Company's internal rules.

The retirement benefits system for directors and corporate auditors of the Company was abolished in June 23, 2006.

(j) Foreign Currency Translation

All monetary assets and liabilities of the Company denominated in foreign currencies are translated into yen at the exchange rates prevailing as of the fiscal year end, and the resulting gain or loss is credited or charged to income.

Assets and liabilities of overseas consolidated subsidiaries are translated into yen at the fiscal year-end exchange rates. Income statements of overseas consolidated subsidiaries are translated into yen at average exchange rates. Differences arising from the translation are presented as translation adjustments and non-controlling interests as components of net assets in its consolidated financial statements.

(k) Derivatives

The Company has entered into various derivatives transactions in order to manage its risk exposure arising from adverse fluctuation in foreign currency exchange rates and interest rates. Derivatives positions are carried at fair value with any changes in unrealized gain or loss charged or credited to income.

(l) Cash Equivalents

All highly liquid investments, generally with a maturity of three months or less when purchased, which are readily convertible into known amounts of cash and are so near maturity that they represent only an insignificant risk of any change in value attributable to changes in interest rates, are considered cash equivalents.

(m) Consumption Taxes

Transactions subject to consumption taxes are recorded at amounts exclusive of consumption taxes.

(n) Consolidated Taxation System

The Company and its domestic consolidated subsidiaries have applied the consolidated taxation system.

(o) Accounting Standards Issued But Not Yet Effective

Accounting Standard and Implementation Guidance on Revenue Recognition

On March 30, 2018, the ASBJ issued "Accounting Standard for Revenue Recognition" (ASBJ Statement No.29) and "Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No.30).

(1) Overview

In May 2014, the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) issued "Revenue from Contracts with Customers," converged guidance on recognizing revenue in contracts with customers (IFRS 15, issued by the IASB, and Topic 606, issued by the FASB). IFRS 15 applies to annual reporting periods beginning on or after January 1, 2018, and Topic 606 applies to annual reporting periods beginning after December 15, 2017. Accordingly, the ASBJ developed a comprehensive accounting standard for revenue recognition and implementation guidance.

As a basic policy with regard to the ASBJ's development of Accounting Standard for Revenue Recognition, from the viewpoint of comparability between financial statements, the ASBJ incorporated the basic principles of IFRS 15, and for any items to be considered from the perspective of historical accounting practices under Japanese GAAP, the ASBJ also included alternative accounting treatments which do not impair comparability with IFRS 15.

(2) Scheduled date of adoption

The company expects to adopt the accounting standard and implementation guidance from the beginning of the fiscal year ending March 31, 2022.

(3) Impact of the adoption of accounting standard and implementation guidance

The Company is currently evaluating the effect of the adoption of this accounting standard and implementation guidance on its consolidated financial statements.

2. Accounting Changes

There are no applicable items.

3. U.S. Dollar Amounts

The translation of yen amounts into U.S. dollar amounts is included solely for convenience and has been made, as a matter of arithmetic computation only, at ¥106.31 = U.S.$1.00, the approximate exchange rate prevailing on March 31, 2018. This translation should not be construed as a representation that yen have been, could have been, or could in the future be, converted into U.S. dollars at that or any other rate.

4. Supplementary Cash Flow Information

The following table represents a reconciliation of cash and deposits with cash and cash equivalents as of March 31, 2018 and 2017:

	As of March 31,		
	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Cash and deposits	¥ 32,752	¥ 22,548	$ 308,080
Restricted cash	(159)	(310)	(1,495)
Cash and cash equivalents	¥ 32,593	¥ 22,237	$ 306,584

The following table represents significant non-cash transactions as of March 31, 2018 and 2017:

	As of March 31,		
	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Assets and obligations relating to finance lease transactions	¥ 290	¥ 46	$ 2,736

5. Notes and Accounts Receivable

Notes and accounts receivable maturing at the end of the year are settled on the date of clearance.

Since March 31, 2018 was a holiday for financial institutions, the following notes and accounts receivable maturing on that date are included in the corresponding balances at year end.

	As of March 31,		
	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Notes receivable	¥ 116	—	$ 1,092

6. Financial Instruments

a. Summary of financial instruments

(1) Policy for financial instruments

The Group raises funds necessary for capital investments, R&D, etc. by bond issuances and bank loans. It manages temporary surplus funds through highly secure financial instruments, and also raises short-term operating funds by issuing commercial paper and obtaining bank loans. The Group follows a policy of using derivatives to hedge foreign currency exchange fluctuation risks and avoids any speculative dealings.

(2) Financial instruments and their risks

Receivables resulting from the ordinary course of business, such as notes and accounts receivable-trade, are exposed to credit risk of customers. Receivables denominated in foreign currencies derived from global business operations are also exposed to foreign currency exchange fluctuation risks. The Group hedges these risks mainly through the use of forward exchange contracts against positions after netting payables denominated in the same foreign currencies, in principle. Investment securities are mainly composed of the shares of corporations with which the Group has business relationships and therefore are exposed to the risk of market price fluctuations.

Payables from the ordinary course of business such as notes and accounts payable-trade are mostly to be settled in one year. As some of them are denominated in foreign currencies due to importing materials and exposed to foreign currency exchange fluctuation risks, they are constantly maintained within the range of receivables in the same currencies. Short-term bank loans and commercial paper are used for financing mainly in relation to operating funds, while long-term bank loans and bonds are used for the purpose of financing capital investments. Some have floating interest rates and are therefore exposed to the risk of interest rate fluctuation.

Forward exchange contracts are derivative transactions that are entered into in order to hedge foreign currency exchange fluctuation risks associated with foreign currency denominated receivables and payables arising from the ordinary course of business.

(3) Risk management for financial instruments

<1> Management of credit risk (risk of customer default)

The sales division of the Group regularly monitors the financial position of main customers and manages due dates and outstanding balances due from each customer in accordance with provisions of credit management regulations to minimize the risk of defaults resulting from the deterioration of a customer's financial position.

<2> Management of market risk (foreign exchange risk, interest rate risk and others)

For receivables and payables denominated in foreign currencies, the Group identifies the foreign currency exchange fluctuation risks by currency each month and enters into forward exchange contracts to hedge such risk. Regarding the market price risk of investment securities, the Group regularly monitors the fair value of such securities as well as financial positions of the issuers. The Group also continuously reviews the status of possessing such securities taking into consideration business relationships with the issuers. When borrowing a bank loan with a floating interest rate, the Group reduces the risk by limiting the loan term to within three years in principle, monitoring the remaining term until the interest rate renewal date, monitoring the interest rate fluctuation trends, and responding in consideration of the balances between short-term loans and long-term loans or between fixed interest rates and floating interest rates.

In regard to derivative transactions, the finance division enters into contracts, confirms balances and keeps accounts based on the corporate policy. The status of derivative transactions is reported monthly to the management meeting.

<3> Management of liquidity risk (risk of failure to repay obligations)

The finance division manages liquidity risk in a timely manner by updating the cash-flow budget based on reports from each business division.

(4) Supplemental explanation of the fair value of financial instruments

Fair values of financial instruments are measured based on the quoted market price, if available, or are reasonably estimated if a quoted market price is not available. The fair value of financial instruments for which a quoted market price is not available is calculated based on certain assumptions, and the fair value might differ if different assumptions are used.

In addition, the contract amounts of the derivative transactions described below in "b. Fair value of financial instruments" do not represent the market risk of the derivative transactions.

b. Fair value of financial instruments

The carrying amounts on the consolidated balance sheets, fair value, and difference as of March 31, 2018 and 2017 are as follows. Financial instruments, for which it is extremely difficult to measure the fair value, are not included. (Please see "Note 2: Financial instruments for which the fair value is extremely difficult to measure," below)

	As of March 31, 2018					
	Carrying amount	Fair value	Difference	Carrying amount	Fair value	Difference
	(Millions of yen)			(Thousands of U.S. dollars)		
Assets						
(1) Cash and deposits	¥ 32,752	32,752	¥ —	$308,080	$308,080	$ —
(2) Notes and accounts receivable-trade	34,656	34,656	—	325,993	325,993	—
(3) Investment securities Other securities	1,323	1,323	—	12,453	12,453	—
Total	¥ 68,732	¥ 68,732	¥ —	$646,527	$646,527	$ —
Liabilities						
(1) Notes and accounts payable-trade	¥ 20,634	¥ 20,634	¥ —	$194,102	$194,102	$ —
(2) Short-term bank loans	13,339	13,339	—	125,480	125,480	—
(3) Commercial paper	7,000	7,000	—	65,845	65,845	—
(4) Bonds	40,000	40,124	124	376,258	377,424	1,166
(5) Long-term debt (except for bonds)	11,975	12,042	67	112,642	113,274	632
(6) Lease obligations	155	153	(2)	1,462	1,442	(19)
Total	¥ 93,105	¥ 93,294	¥ 189	$875,791	$877,569	$ 1,778
Derivative transactions (*)	¥ 997	¥ 997	¥ —	$ 9,385	$ 9,385	$ —

(*) Derivative transactions are shown at the net value of the assets and liabilities arising from the transactions.

	As of March 31, 2017		
	Carrying amount	Fair value	Difference
		(Millions of yen)	
Assets			
(1) Cash and deposits	¥ 22,548	¥ 22,548	¥ —
(2) Notes and accounts receivable-trade	33,867	33,867	—
(3) Investment securities Other securities	1,373	1,373	—
Total	¥ 57,789	¥ 57,789	¥ —
Liabilities			
(1) Notes and accounts payable-trade	¥ 18,391	¥ 18,391	¥ —
(2) Short-term bank loans	23,151	23,151	—
(3) Commercial paper	15,000	15,000	—
(4) Bonds	40,000	40,119	119
(5) Long-term debt (except for bonds)	12,500	12,598	98
(6) Lease obligations	376	372	(3)
Total	¥ 109,419	¥ 109,634	¥ 214
Derivative transactions (*)	¥ (493)	¥ (493)	¥ —

(*) Derivative transactions are shown at the net value of the assets and liabilities arising from the transactions.

Note 1: Methods to measure the fair value of financial instruments, investment securities, and derivative transactions

Assets

(1) Cash and deposits, and (2) Notes and accounts receivable-trade

The carrying amount approximates fair value because of the short maturities of these instruments.

(3) Investment securities

The fair value of equity securities equals quoted market prices, if available. Information on investment securities classified by holding purpose is described in “Note 7. Securities.”

Liabilities

(1) Notes and accounts payable-trade, (2) Short-term bank loans and current portion of long-term debt, and (3) Commercial paper

The carrying amount approximates fair value because of the short maturities of these instruments.

(4) Bonds

The fair value equals quoted market prices.

(5) Long-term debt (except for bonds)

The fair value of long-term debt on floating interest rates is nearly equal to the carrying value as market rate is reflected in a short period. The fair value of long-term debt on fixed interest rates is based on the present value of the total amount of principal and interest discounted by the interest rates that would presumably apply to similar debt.

(6) Lease obligations

The fair value of lease obligations is based on the present value of the total amount of payments discounted by the interest rates that would presumably apply to similar lease contract.

Derivative transactions

Contract amounts and estimated fair value are described in “Note 8. Derivatives”

Note 2: Financial instruments for which the fair value is extremely difficult to measure

	As of March 31,		
	2018 Carrying amount	2017 Carrying amount	**2018** Carrying amount
	(Millions of yen)		(Thousands of U.S. dollars)
Unlisted equity securities and others	**¥ 83**	¥ 83	**$ 786**

The above are not included in “Assets (3) Investment securities” because no quoted market price is available and it is extremely difficult to measure the fair value.

Note 3: The redemption schedule for receivables and investment securities with maturities subsequent to the consolidated closing date

	As of March 31, 2018			
	Within 1 year	Over 1 year within 5 years	Over 5 years within 10 years	Over 10 years
	(Millions of yen)			
Cash and deposits	**¥ 32,752**	**¥ —**	**¥ —**	**¥ —**
Notes and accounts receivable-trade	**34,656**	**—**	**—**	**—**
Investment securities				
Other securities with maturities	**—**	**—**	**—**	**—**
Total	**¥ 67,408**	**¥ —**	**¥ —**	**¥ —**

	As of March 31, 2018			
	Within 1 year	Over 1 year within 5 years	Over 5 years within 10 years	Over 10 years
	(Thousands of U.S. dollars)			
Cash and deposits	**$ 308,080**	**$ —**	**$ —**	**$ —**
Notes and accounts receivable-trade	**325,993**	**—**	**—**	**—**
Investment securities				
Other securities with maturities	**—**	**—**	**—**	**—**
Total	**$ 634,073**	**$ —**	**$ —**	**$ —**

	As of March 31, 2017			
	Within 1 year	Over 1 year within 5 years	Over 5 years within 10 years	Over 10 years
	(Millions of yen)			
Cash and deposits	¥ 22,548	¥ —	¥ —	¥ —
Notes and accounts receivable-trade	33,867	—	—	—
Investment securities				
Other securities with maturities	—	—	—	—
Total	¥ 56,416	¥ —	¥ —	¥ —

Note 4: The redemption schedule for bonds, long-term debt and lease obligations and other liabilities with maturities subsequent to the consolidated closing date

	As of March 31, 2018					
	Due in 1 year or less	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years
	(Millions of yen)					
Short-term bank loans	**¥ 13,339**	**¥ —**	**¥ —**	**¥ —**	**¥ —**	**¥ —**
Commercial paper	**7,000**	**—**	**—**	**—**	**—**	**—**
Bonds	**15,000**	**—**	**15,000**	**10,000**	**—**	**—**
Long-term debt (except for bonds)	**500**	**—**	**9,500**	**—**	**1,975**	**—**
Lease obligations	**87**	**32**	**16**	**8**	**6**	**4**
Total	**¥ 35,927**	**¥ 32**	**¥ 24,516**	**¥ 10,008**	**¥ 1,981**	**¥ 4**

	As of March 31, 2018					
	Due in 1 year or less	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years
	(Thousands of U.S. dollars)					
Short-term bank loans	$125,480	$ —	$ —	$ —	$ —	$ —
Commercial paper	65,845	—	—	—	—	—
Bonds	141,096	—	141,096	94,064	—	—
Long-term debt (except for bonds)	4,703	—	89,361	—	18,577	—
Lease obligations	826	301	155	76	59	42
Total	$337,952	$ 301	$230,613	$ 94,141	$ 18,637	$ 42

	As of March 31, 2017					
	Due in 1 year or less	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years
	(Millions of yen)					
Short-term bank loans	¥ 23,151	¥ —	¥ —	¥ —	¥ —	¥ —
Commercial paper	15,000	—	—	—	—	—
Bonds	—	15,000	—	15,000	10,000	—
Long-term debt (except for bonds)	7,500	—	—	5,000	—	—
Lease obligations	220	88	27	20	9	10
Total	¥ 45,871	¥ 15,088	¥ 27	¥ 20,020	¥ 10,009	¥ 10

7. Securities

(1) Other securities

Marketable securities classified as other securities at March 31, 2018 and 2017 are summarized as follows:

	As of March 31, 2018					
	Carrying amount	Acquisition cost	Net unrealized gain (loss)	Carrying amount	Acquisition cost	Net unrealized gain (loss)
	(Millions of yen)			(Thousands of U.S. dollars)		
Securities whose carrying amount exceeds their acquisition cost:						
Equity securities	¥ 1,159	¥ 592	¥ 566	$ 10,905	$ 5,576	$ 5,328
Securities whose acquisition cost exceeds their carrying amount:						
Equity securities	164	169	(4)	1,548	1,590	(41)
	¥ 1,323	¥ 761	¥ 562	$ 12,453	$ 7,166	$ 5,287

	As of March 31, 2017		
	Carrying amount	Acquisition cost	Net unrealized gain (loss)
	(Millions of yen)		
Securities whose carrying amount exceeds their acquisition cost:			
Equity securities	¥ 1,337	¥ 723	¥ 614
Securities whose acquisition cost exceeds their carrying amount:			
Equity securities	36	38	(2)
	¥ 1,373	¥ 761	¥ 611

8. Derivatives

Summarized below are the contract amounts and estimated fair value of the Company's open derivatives positions at March 31, 2018 and 2017, for which deferral hedge accounting has not been applied:

	2018		2017		2018	
	Contract amount	Estimated fair value	Contract amount	Estimated fair value	Contract amount	Estimated fair value
	(Millions of yen)				(Thousands of U.S. dollars)	
Forward foreign exchange contracts:						
Sell U.S. dollars	¥ 25,974	¥ 997	¥ 15,485	¥ (493)	$244,331	$ 9,385

9. Inventories

Inventories at March 31, 2018 and 2017 were as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Finished products	¥ 12,061	¥ 18,227	$ 113,452
Work in process	20,600	24,019	193,780
Raw materials and supplies	4,969	8,918	46,746
	¥ 37,631	¥ 51,165	$ 353,978

The book values of inventories were written down to reflect the decline in profitability by ¥550 million ($5,181 thousand) and ¥313 million for the years ended March 31, 2018 and 2017, respectively. The inventory write-downs were included in "Cost of sales".

10. Property, Plant and Equipment

Accumulated depreciation of property, plant and equipment for the years ended March 31, 2018 and 2017 was as follows:

	As of March 31,		
	2018 Carrying amount	2017 Carrying amount	2018 Carrying amount
	(Millions of yen)		(Thousands of U.S. dollars)
Property, plant and equipment	¥ 150,928	¥ 147,487	$ 1,419,700

11. Short-Term Borrowings and Long-Term Debt

Short-term bank loans generally represent notes and overdrafts. The related weighted average interest rates at March 31, 2018 and 2017 were approximately 1.36% and 1.02%, respectively. The weighted average interest rate applicable to the current portion of long-term debt (excluding lease obligations) was approximately 0.39% at March 31, 2018. The weighted average interest rates applicable to commercial paper at March 31, 2018 and 2017 were approximately 0.16% and 0.16%, respectively. The weighted average interest rates applicable to the current portion of lease obligations at March 31, 2018 and 2017 were approximately 1.96% and 2.07%, respectively.

Long-term debt at March 31, 2018 and 2017 is summarized as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Loans payable in yen with a weighted average rate of 0.46% at March 31, 2018 and 0.49% at March 31, 2017	¥ 11,975	¥ 12,500	$ 112,642
0.80% bonds due 2020	15,000	15,000	141,096
0.59% bonds due 2019	15,000	15,000	141,096
0.67% bonds due 2021	10,000	10,000	94,064
Lease obligations with a weighted average rate of 1.68% at March 31, 2018 and 1.93% at March 31, 2017	155	376	1,462
	52,130	52,876	490,362
Less current portion	(15,587)	(7,720)	(146,626)
	¥ 36,542	¥ 45,156	$ 343,736

As is customary in Japan, both short-term and long-term bank loans are made under general agreements which provide that collateral and guarantees (or additional collateral or guarantees as appropriate) for present and future indebtedness be given at the request of the bank, and that the bank has the right, as the obligations become due, or in the event of default thereon, to offset cash deposits against any such obligations due to the bank. Under certain loan agreements relating to long-term debt, the creditors may require the Company to submit proposals for appropriations of retained earnings (including the payment of dividends) for the creditors' review and approval prior to their presentation to the shareholders. None of the creditors has ever exercised these rights.

At March 31, 2018 and 2017, the assets pledged as collateral for short-term bank loans were as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Buildings	¥ 62	¥ 67	$ 588
Other assets	8	8	78
	¥ 70	¥ 76	$ 666

At March 31, 2018 and 2017, short-term bank loans secured by collateral were as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Short-term bank loans	¥ 50	¥ 81	$ 477

12. Lines of Credit

The Company and certain overseas subsidiaries have committed line-of-credit agreements and have entered into overdraft agreements with certain financial institutions in order to raise operating funds efficiently. The balances of credit available at March 31, 2018 and 2017 are summarized as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Total committed lines of credit and overdraft	¥ 42,046	¥ 42,419	$ 395,510
Outstanding balance	9,019	13,636	84,841
	¥ 33,027	¥ 28,783	$ 310,668

13. Selling, General and Administrative Expenses

The principal components of selling, general and administrative expenses for the years ended March 31, 2018 and 2017 are summarized as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Salaries and bonuses	¥ 15,101	¥ 13,974	$ 142,047
Packing and shipping expenses	1,679	1,411	15,798
Outside services	2,458	2,544	23,121
Provision for doubtful receivables	21	302	203
Provision for directors' retirement benefits	6	9	64
Retirement benefit expenses	(22)	(42)	(213)

14. Loss on Disposal of Fixed Assets

The losses on disposal of fixed assets for the years ended March 31, 2018 and 2017 is summarized as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Buildings	¥ 40	¥ 3	$ 381
Machinery and equipment	55	432	524
Tools, furniture and fixtures	0	4	7
	¥ 97	¥ 440	$ 913

15. Restructuring Cost

The restructuring cost for the years ended March 31, 2018 and 2017 are summarized as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Loss on disposal of inventories	¥ 16,572	¥ —	$ 155,891
Special retirement expenses	1,742	—	16,388
	¥ 18,315	¥ —	$ 172,280

16. Reclassification Adjustments and Tax Effect Relating to Other Comprehensive Income

Reclassification adjustments and tax effect relating to other comprehensive income (loss) for the years ended March 31, 2018 and 2017 are summarized as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Net unrealized gain on securities			
Change during the year	¥ (49)	¥ 253	$ (468)
Reclassification adjustments	—	—	—
Amount before tax effect	(49)	253	(468)
Tax effect	14	(77)	137
Net unrealized gain (loss) on securities	¥ (35)	¥ 175	$ (331)
Translation adjustments			
Change during the year	¥ (3,163)	¥ (960)	$ (29,758)
Reclassification adjustments	606	—	5,704
Translation adjustments	¥ (2,557)	¥ (960)	$ (24,053)
Retirement benefit liability adjustments			
Change during the year	¥ (1,384)	¥ (635)	$ (13,026)
Reclassification adjustments	516	425	4,859
Amount before tax effect	(868)	(209)	(8,167)
Tax effect	(2)	66	(22)
Retirement benefit liability adjustments	¥ (870)	¥ (142)	$ (8,190)
Total other comprehensive loss	¥ (3,463)	¥ (927)	$ (32,574)

17. Retirement Benefit Plans

The Company and its domestic consolidated subsidiaries have defined benefit pension plans and lump-sum payment plans, covering substantially all employees who are entitled to lump-sum or annuity payments, the amounts of which are determined by reference to their basic rates of pay, length of service, and the conditions under which termination occurs. The Company and certain domestic subsidiaries have a defined contribution plan and an advance payment plan. The Company and certain domestic subsidiaries have adopted a cash balance plan.

The overseas consolidated subsidiaries principally have defined contribution pension plans.

Certain consolidated subsidiary uses a simplified method for calculating retirement benefit expenses and liabilities.

Defined benefit plans

The changes in the retirement benefit obligation during the years ended March 31, 2018 and 2017 are as follows (excluding plans for which the simplified method is applied):

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Balance at the beginning of the year	¥ 30,018	¥ 30,948	$ 282,366
Service cost	1,236	1,317	11,628
Interest cost	261	234	2,462
Actuarial (gain) loss	238	(467)	2,246
Retirement benefit paid	(2,836)	(1,292)	(26,683)
Decrease due to transfer of retirement benefit plans	—	(302)	—
Prior service costs	41	—	389
Other	(162)	(419)	(1,527)
Balance at the end of the year	¥ 28,797	¥ 30,018	$ 270,883

The changes in plan assets during the years ended March 31, 2018 and 2017 are as follows (excluding plans for which the simplified method is applied):

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Balance at the beginning of the year	¥ 27,507	¥ 26,944	$ 258,744
Expected return on plan assets	1,913	1,915	18,000
Actuarial loss	(1,165)	(1,386)	(10,965)
Contributions by the Company	1,268	1,384	11,929
Retirement benefit paid	(2,775)	(1,285)	(26,104)
Other	(66)	(66)	(628)
Balance at the end of the year	¥ 26,681	¥ 27,507	$ 250,975

The following table sets forth the funded and accrued status of the plans, and the amounts recognized in the accompanying consolidated balance sheet at March 31, 2018 and 2017 for the Company's and the consolidated subsidiaries' defined benefit plans:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Retirement benefit obligation	¥ 28,471	¥ 29,671	$ 267,813
Plan assets at fair value	(26,681)	(27,507)	(250,975)
	1,790	2,164	16,837
Unfunded retirement benefit obligation	443	462	4,167
Net liability for retirement benefits in the balance sheet	¥ 2,233	¥ 2,627	$ 21,005
Liabilities for retirement benefits	2,632	2,627	24,765
Assets for retirement benefits	(399)	—	(3,760)
Net liability for retirement benefits in the balance sheet	¥ 2,233	¥ 2,627	$ 21,005

Note: Including a system that applies the simplified method.

The components of retirement benefit expense for the years ended March 31, 2018 and 2017 are outlined as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Service cost	¥ 1,236	¥ 1,317	$ 11,628
Interest cost	261	234	2,462
Expected return on plan assets	(1,913)	(1,915)	(18,000)
Amortization of actuarial loss	739	711	6,959
Amortization of prior service cost	(223)	(286)	(2,099)
Retirement benefit expenses calculated using simplified method	18	19	176
Retirement benefit expense for defined benefit plans	¥ 119	¥ 81	$ 1,126

Note: In addition to the above retirement benefit expenses, "special retirement benefits" amounts of ¥190 million and "Restructuring cost" amounts of ¥1,742 million are recorded as extraordinary losses for the years ended March 31, 2018.

The components of retirement benefit adjustments included in other comprehensive income (before tax effect) for the years ended March 31, 2018 and 2017 are outlined as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Prior service cost	¥ (266)	¥ 17	$ (2,503)
Actuarial gain (loss)	(602)	(226)	(5,663)
Total	¥ (868)	¥ (209)	$ (8,167)

The components of retirement benefit adjustments included in accumulated other comprehensive income (before tax effect) as of March 31, 2018 and 2017 are outlined as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Unrecognized prior service cost	¥ (1,479)	¥ (1,745)	$ (13,916)
Unrecognized actuarial gain (loss)	5,612	5,010	52,793
Total	¥ 4,133	¥ 3,264	$ 38,877

The fair values of plan assets, by major categories, as percentages of total plan assets as of March 31, 2018 and 2017 are as follows:

	2018	2017
Bonds	49%	43%
Stocks	24%	26%
Alternative investments	2%	3%
General accounts of life insurance companies	10%	10%
Other	15%	18%
Total	100%	100%

Note: Alternative investments are primarily investments in funds

The expected return on plan assets has been estimated based on the anticipated allocation to each asset class and the expected long-term returns on assets held in each category.

The weighted-average actuarial assumptions used in accounting for the above plans were as follows:

	2018	2017
Discount rate	0.8%	0.9%
Expected rate of return on plan assets	6.9%	6.9%

Defined benefit plans accounted for using simplified method

The changes in the retirement benefit obligation calculated by the simplified method during the years ended March 31, 2018 and 2017 are as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Balance at the beginning of the year	¥ 116	¥ 100	$ 1,088
Retirement benefit expenses	18	19	176
Retirement benefit paid	(17)	(6)	(162)
Other	(0)	1	(5)
Balance at the end of the year	¥ 116	¥ 116	$ 1,097

Defined contribution plans

For the years ended March 31, 2018 and 2017, contributions to the defined contribution pension plan and the advance payment plan, which are recognized as expenses, totaled ¥917 million ($8,628 thousand) and ¥778 million, respectively.

18. Income Taxes

Income taxes applicable to the Company comprise corporation, enterprise and inhabitants' taxes, which, in the aggregate, resulted in an effective statutory tax rate of approximately 30.7% for the years ended March 31, 2017, respectively.

The reconciliation between the effective tax rates reflected in the Consolidated Statements of Operations and effective statutory tax rates for the years ended March 31, 2017 was as follows:

	2018	2017
Effective statutory tax rate	—	30.7%
Effect of:		
Non-deductible expenses for income tax purposes	—	11.0
Non-taxable dividend income	—	(3.0)
Inhabitants' per capita taxes	—	0.5
Foreign tax rate difference	—	2.3
Changes in valuation allowance	—	20.1
Other, net	—	0.9
Effective tax rate	—	62.6%

The reconciliation for the year ended March 31, 2018 is not disclosed because Company reported a loss before income taxes for the year.

The significant components of the Company's deferred tax assets and liabilities as of March 31, 2018 and 2017 were as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Deferred tax assets:			
Net operating loss carryforwards	¥ 18,690	¥ 15,325	$ 175,811
Liabilities for retirement benefits	384	523	3,613
Inventories	243	2,114	2,288
Accrued bonuses	1,900	2,404	17,877
Net unrealized holding gain	318	414	2,999
Impairment losses	287	317	2,705
Other	858	595	8,073
Gross deferred tax assets	22,683	21,694	213,370
Valuation allowance	(21,046)	(18,632)	(197,973)
Total deferred tax assets	1,636	3,062	15,396
Deferred tax liabilities:			
Fixed assets	(1,187)	(2,118)	(11,166)
Net unrealized gains on securities	(171)	(183)	(1,613)
Other	(772)	(652)	(7,263)
Total deferred tax liabilities	(2,130)	(2,954)	(20,043)
Net deferred tax assets (liabilities)	¥ (493)	¥ 107	$ (4,646)

Note: Net deferred tax assets (liabilities) as of March 31, 2018 and 2017 are reflected in the following accounts in the consolidated balance sheet:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Current assets – deferred tax assets	¥ 1,207	¥ 2,080	$ 11,358
Investments and other assets – deferred tax assets	411	204	3,870
Current liabilities – deferred tax liabilities	(294)	—	(2,770)
Long-term liabilities – deferred tax liabilities	(1,818)	(2,178)	(17,106)

With the enactment of the Tax Reform Act in the United States on December 22, 2017, the federal corporate tax rate applicable to U.S. consolidated subsidiaries was reduced from 35% to 21%. As a result of this reduction, deferred tax liabilities (net of deferred tax assets) decreased by ¥52 million ($491 thousand) and income taxes-deferred on statement of decreased by ¥54 million ($512 thousand) as of or for the year ended March 31, 2018.

19. Shareholders' Equity

The Japanese Corporate Law ("the Law") became effective on May 1, 2006, replacing the Japanese Commercial Code ("the Code"). The Law is generally applicable to events and transactions occurring after April 30, 2006 and for fiscal years ending after that date.

Under Japanese laws and regulations, the entire amount paid for new shares is required to be designated as common stock. However, a company may, by a resolution of the Board of Directors, designate an amount not exceeding one-half of the prices of the new shares as additional paid-in capital, which is included in capital surplus.

Under the Law, in cases where a dividend distribution of surplus is made, the smaller of an amount equal to 10% of the dividend and the excess, if any, of 25% of common stock over the total of additional paid-in capital and the legal earnings reserve must be set aside as additional paid-in capital or a legal earnings reserve. The legal earnings reserve is included in retained earnings in the accompanying consolidated balance sheets.

Under the Code, companies were required to set aside an amount equal to at least 10% of the aggregate amount of cash dividends and other cash appropriations as a legal earnings reserve until the total of the legal earnings reserve and additional paid-in capital equaled 25% of common stock.

Under the Code, the legal earnings reserve and additional paid-in capital could be used to eliminate or reduce a deficit by a resolution of the shareholders' meeting or could be capitalized by a resolution of the Board of Directors. Under the Law, both of these appropriations generally require a resolution of the shareholders' meeting.

Additional paid-in capital and the legal earnings reserve may not be distributed as dividends. Under the Code, however, on the condition that the total amount of the legal earnings reserve and additional paid-in capital remained equal to or exceeded 25% of common stock; they were available for distribution by resolution of the shareholders' meeting.

Under the Law, all additional paid-in capital and all legal earnings reserves may be transferred to other capital surplus and retained earnings, respectively, which are potentially available for dividends.

The maximum amount that the Company can distribute as dividends is calculated based on the non-consolidated financial statements of the Company in accordance with the Law.

(1) Dividends paid:

For the year ended March 31, 2018

	Type of shares	Total dividends (Millions of yen)	Dividends per share (Yen)	Total dividends (Thousands of U.S. dollars)	Dividends per share (U.S. dollars)	Cut-off date	Effective date
Annual general meeting of the shareholders on June 23, 2017	Common stock	¥ 424	¥ 3.50	$ 3,989	$ 0.032	March 31, 2017	June 26, 2017
Meeting of the Board of Directors on November 6, 2017	Common stock	¥ 363	¥ 3.00	$ 3,419	$ 0.028	September 30, 2017	December 5, 2017

For the year ended March 31, 2017

There are no applicable items.

(2) Dividends with the cut-off date in the year ended March 31, 2018 and the effective date in the year ending March 31, 2019

	Type of shares	Source of dividends	Total dividends (Millions of yen)	Dividends per share (Yen)	Total dividends (Thousands of U.S. dollars)	Dividends per share (U.S. dollars)	Cut-off date	Effective date
Annual general meeting of the shareholders on June 22, 2018	Common stock	Retained earnings	¥ 363	¥ 3.00	$ 3,419	$ 0.028	March 31, 2018	June 25, 2018

Dividends with the cut-off date in the year ended March 31, 2017 and the effective date in the year ended March 31, 2018

	Type of shares	Source of dividends	Total dividends (Millions of yen)	Dividends per share (Yen)	Cut-off date	Effective date
Annual general meeting of the shareholders on June 23, 2017	Common stock	Retained earnings	¥ 424	¥ 3.50	March 31, 2017	June 26, 2017

20. Research and Development Expenses

Research and development expenses for the years ended March 31, 2018 and 2017 were ¥17,563 million ($165,208 thousand) and ¥15,998 million, respectively.

21. Leases

Future minimum lease payments subsequent to March 31, 2018 and 2017 for noncancellable operating leases are as follows:

	2018	2017	2018
	(Millions of yen)		(Thousands of U.S. dollars)
Due in 1 year or less	¥ 635	¥ 574	$ 5,978
Due after 1 year	2,123	895	19,971
	¥ 2,758	¥ 1,469	$ 25,949

22. Segment Information

a. Outline of reportable segments

The reportable segments of the Company are the business units for which the Company is able to obtain respective financial information separately in order for the Board of Directors to conduct periodic analysis to determine the distribution of management resources and evaluate their business results.

The Company classifies its business units based on their products. Each business unit plans its own comprehensive domestic and overseas strategies for its products, and conducts its business activities. Therefore, the Company consists of its business units, identified by principal products, which are the following two reportable segments "Semiconductor Devices Business" and the "Power System Business."

The Semiconductor Devices Business mainly manufactures and sells power module, power ICs, control ICs, Hall-effect ICs, bipolar transistors, MOSFET, IGBT, thyristors, rectifier diodes and light emitting diodes (LEDs). The Power System Business mainly manufactures and sells uninterruptible power supplies (UPS), inverters, DC power supplies, airway beacon systems, switching mode power supply units and transformers.

From the year ended March 31, 2018, the Power Module Business and the Power System Business have been integrated into the Power System Business, and reportable segments changed into the two abovementioned segments, namely, the Semiconductor Devices Business and the Power System Business. The following financial information for each reportable segment has been prepared based on the new segment classification.

b. Calculation methods of the reportable segment sales, income (loss), assets, and other items

The accounting methods applied for reportable segments are the same as the basis of preparation for the consolidated financial statements. Intersegment sales and transfers are based on the prices in arm's-length transactions.

c. Information about sales and segment income (loss) by reportable segments

	Reportable segments				
	Semiconductor Devices Business	Power System Business	Total	Adjustments	Consolidated
			(Millions of yen)		
As of and for the year ended March 31, 2018					
Sales:					
(1) Sales to external customers	¥ 143,836	¥ 31,373	¥ 175,209	¥ —	¥ 175,209
(2) Intersegment sales and transfers	805	58	864	(864)	—
Total sales	144,642	31,431	176,074	(864)	175,209
Segment income (loss)	¥ 14,236	¥ 474	¥ 14,710	¥ (2,684)	¥ 12,026
Segment assets	¥ 139,643	¥ 17,815	¥ 157,458	¥ 28,216	¥ 185,675
Others:					
Depreciation and amortization	10,193	199	10,393	675	11,068
Impairment losses	—	50	50	—	50
Increase in property, plant, equipment and intangible assets	16,583	231	16,815	482	17,297
			(Thousands of U.S. dollars)		
As of and for the year ended March 31, 2018					
Sales:					
(1) Sales to external customers	$ 1,352,991	$ 295,111	$ 1,648,102	$ —	$ 1,648,102
(2) Intersegment sales and transfers	7,580	549	8,130	(8,130)	—
Total sales	1,360,571	295,660	1,656,232	(8,130)	1,648,102
Segment income (loss)	$ 133,917	$ 4,460	$ 138,377	$ (25,247)	$ 113,130
Segment assets	$ 1,313,552	$ 167,577	$ 1,481,130	$ 265,421	$ 1,746,552
Others:					
Depreciation and amortization	95,888	1,879	97,767	6,352	104,119
Impairment losses	—	475	475	—	475
Increase in property, plant, equipment and intangible assets	155,996	2,175	158,172	4,539	162,711

Notes:
1. Adjustments for segment income (loss) of ¥(2,684) million ($(25,247) thousand) include corporate expenses. They are mainly general and administrative expenses, which are not allocable to the reportable segments.
2. Adjustments for segment assets of ¥28,216 million ($265,421 thousand) include corporate assets, which are not allocable to the reportable segments. The corporate assets are mainly surplus operating capital (cash and deposits), long-term investments (investment securities) and assets related to administrative departments of the Company.
3. Adjustments for depreciation and amortization of ¥675 million ($6,352 thousand) are mainly administrative expenses.
4. Adjustments for increase in property, plant, equipment and intangible assets of ¥482 million ($4,539 thousand) are assets related to administrative departments of the Company.
5. Segment income is measured according to operating income

	Reportable segments				
	Semiconductor Devices Business	Power System Business	Total	Adjustments	Consolidated
			(Millions of yen)		
As of and for the year ended March 31, 2017					
Sales:					
(1) Sales to external customers	¥ 129,322	¥ 29,449	¥ 158,772	¥ —	¥ 158,772
(2) Intersegment sales and transfers	750	227	977	(977)	—
Total sales	130,073	29,676	159,750	(977)	158,772
Segment income (loss)	¥ 9,251	¥ (565)	¥ 8,686	¥ (2,755)	¥ 5,930
Segment assets	¥ 139,878	¥ 27,602	¥ 167,480	¥ 15,219	¥ 182,700
Others:					
Depreciation and amortization	10,153	219	10,373	672	11,045
Impairment losses	—	135	135	—	135
Increase in property, plant, equipment and intangible assets	8,635	345	8,980	131	9,112

Notes:
1. Adjustments for segment income (loss) of ¥(2,755) million include corporate expenses. They are mainly general and administrative expenses, which are not allocable to the reportable segments.
2. Adjustments for segment assets of ¥15,219 million include corporate assets, which are not allocable to the reportable segments. The corporate assets are mainly surplus operating capital (cash and deposits), long-term investments (investment securities) and assets related to administrative departments of the Company.
3. Adjustments for depreciation and amortization of ¥672 million are mainly administrative expenses.
4. Adjustments for increase in property, plant, equipment and intangible assets of ¥131 million are assets related to administrative departments of the Company.
5. Segment income is measured according to operating income

d. Related information

Information about geographical area

As of and for the year ended March 31, 2018

(1) Sales

Japan	Asia: China	Asia: Korea	America	Europe	Others	Total
			(Millions of yen)			
¥ 63,787	**¥ 77,836**	**¥ 39,079**	**¥ 19,003**	**¥ 17,597**	**¥ 15,839**	**¥ 149**
			(Thousands of U.S. dollars)			

Japan	Asia: China	Asia: Korea	America	Europe	Others	Total
¥ 63,787	**¥ 77,836**	**¥ 39,079**	**¥ 19,003**	**¥ 17,597**	**¥ 15,839**	**¥ 149**

Note: Sales are classified in countries or regions based on location of customers.

(2) Property, plant and equipment

Japan	North America	Asia: Thailand	Others	Total
		(Millions of yen)		
¥ 27,373	**¥ 22,261**	**¥ 13,849**	**¥ 8,018**	**¥ 483**
		(Thousands of U.S. dollars)		
$ 257,487	**$ 209,397**	**$ 130,279**	**$ 75,424**	**$ 4,552**

As of and for the year ended March 31, 2017

(2) Property, plant and equipment

Japan	Asia: China	Asia: Korea	North America	Europe	Others	Total
			(Millions of yen)			
¥ 60,810	¥ 65,107	¥ 29,921	¥ 15,873	¥ 17,513	¥ 15,067	¥ 273

Note: Sales are classified in countries or regions based on location of customers.

(2) Property, plant and equipment

Japan	North America	Asia: Thailand	Others	Total
		(Millions of yen)		
¥ 24,256	¥ 23,457	¥ 11,944	¥ 7,740	¥ 545

23. Amounts per Share

Amounts per share as of and for the years ended March 31, 2018 and 2017 were as follows:

	2018	2017	**2018**
	(Yen)		(U.S. dollars)
Profit attributable to owners of Parent– basic	**¥ (94.24)**	¥ 14.35	**$ (0.88)**
Net assets	**456.66**	448.87	**4.29**

Diluted profit attributable to owners of Parent per share was not disclosed because of net loss per share for the years ended March 31, 2018 and there were no dilutive shares for the years ended March31, 2017.

Profit attributable to owners of Parent per share was calculated on the following basis:

	2018	2017	**2018**
	(Millions of yen, except number of shares)		(Thousands of U.S. dollars, except number of shares)
Profit (loss) attributable to owners of Parent	**¥ (11,421)**	¥ 1,739	**$ (107,433)**
Amounts not available to shareholders of common stock	**—**	—	**—**
Profit (loss) attributable to owners of common stock of Parent	**(11,421)**	1,739	**(107,433)**
Average number of shares outstanding during the year (Thousands of shares)	**121,187**	121,209	**—**

Net assets per share were calculated on the following basis:

	2018	2017	**2018**
	(Millions of yen, except number of shares)		(Thousands of U.S. dollars, except number of shares)
Net assets	**¥ 72,283**	¥ 54,736	**$ 679,928**
Amounts deducted from net assets:	**16,947**	335	**159,413**
Non-controlling interests	**(16,947)**	(335)	**(159,413)**
Net assets attributable to shareholders	**55,335**	54,401	**520,515**
Number of shares outstanding at the end of the year (Thousands of shares)	**121,174**	121,196	**—**

24. Significant Subsequent Events

At a meeting of the Board of Directors held on May 8, 2018, it was resolved to propose a resolution to the 101st Ordinary General Meeting of Shareholders held on June 22, 2018, concerning a consolidation of shares and change in the number of shares constituting one trading unit, which was also approved at the meeting of the Board of Directors.

Securities exchanges across Japan are promoting measures to unify trading units into 100 shares. Accordingly, the number of shares per unit of common stock, which is the trading unit of common stock, will be changed from 1,000 shares to 100 shares. In addition, the share consolidation will be implemented in order to maintain the price level of investment units within a desirable range (between ¥50,000 and ¥500,000) on the stock exchange.

(1) Class of shares to be consolidated
Common stock

(2) Method and share consolidation ratio
The number of shares held by shareholders recorded in the register of shareholders as of October 1, 2018 shall be consolidated at a ratio of one share per five common shares.

(3) Decrease in number of shares due to consolidation of shares
The total number of shares outstanding before the share consolidation (as of March 31, 2018) was 125,490,302. The decrease in the number of shares due to the share consolidation will be 100,392,242. Furthermore, the total number of shares outstanding after the share consolidation will be 25,098,060.

(4) Treatment of fractional shares
In the event that fractional shares less than one share are generated as a result of the consolidation of shares, such fractional shares shall be disposed of in a lump sum in accordance with Article 235 of the Companies Act, and the proceeds shall be distributed to the holders of such fractional shares on a pro rata basis.

(5) Total number of authorized shares as of effective date of share consolidation
51,400,000 shares (before share consolidation: 257,000,000 shares)
Based on Article 182 (2) of the Companies Act, on the effective date of the share consolidation, October 1, 2018, the provisions of the articles of incorporation of the Company pursuant to the provision concerning the total number of authorized shares is deemed to have changed.

(6) Effect on per share information
Assuming that the share consolidation was conducted at the beginning of the fiscal year ended March 31, 2017 per share information is as follows:

	2018	2017	2018
	(yen)		(U.S. dollars)
Net assets	¥ 2,283.31	¥ 2,244.33	$ 21.47
Net Income (loss) per Share	(471.22)	71.74	(4.43)

Independent Auditor's Report

The Board of Directors
Sanken Electric Co., Ltd.

We have audited the accompanying consolidated financial statements of Sanken Electric Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2018, and the consolidated statements of operations, comprehensive income (loss), changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Sanken Electric Co., Ltd. and its consolidated subsidiaries as at March 31, 2018, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

Convenience Translation

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 3.

Ernst & Young ShinNihon LLC

June 22, 2018
Tokyo, Japan

Board of Directors

As of June 22, 2018

Directors and Auditors

Representative Director, President	Takashi Wada	
Directors	Masao Hoshino Kazunori Suzuki Shigeru Ito	Yoshihiro Suzuki Hideo Takani
External Directors	Richard R. Lury	Noriharu Fujita
Standing Statutory Auditor	Akira Ota	
Statutory Auditor	Noboru Suzuki	
External Auditors	Mikihiko Wada	Astushi Minami

Corporate Officers

Executive Vice President	Masao Hoshino	
Senior Vice Presidents	Yoshihiro Suzuki Takeshi Soroji	Kazunori Suzuki
Senior Corporate Officers	Hideo Takani Shigeru Ito	Hideki Nakamichi
Corporate Officers	Yukiyasu Taniyama Masaki Kanazawa Myungjun Lee Sumio Anzai Masayuki Yanagisawa	Kiyonori Orito Makoto Iwata Tetsuo Bannai Satoshi Yoshida Hiroshi Takahashi

Investor Information

As of March 31, 2018

Company name	Sanken Electric Co., Ltd.
Founded	September 5, 1946
Headquarter	3-6-3 Kitano, Niiza-shi, Saitama-ken 352-8666, Japan Phone: +81-48-472-1111 Facsimile: +81-48-471-6249
Employees	9,725
Common stock	Authorized: 257,000,000 shares Issued: 125,490,302 shares
Shareholders	9,716

Distribution by type of shareholders		
	Financial Institutions	33.73%
	Individuals	18.13%
	Foreigners	39.56%
	Other	8.58%
Distribution by number of shares owned		
	1,000,000 or more	53.27%
	100,000 or more	25.51%
	10,000 or more	8.85%
	Less than 10,000	12.37%

Principal Shareholders

Shareholders	Number of shares held (in thousands)	Percentage of ownership
The Master Trust Bank of Japan, Ltd. (Trust Account)	10,168	8.10%
Japan Trustee Services Bank, Ltd. (Trust Account)	7,677	6.11%
Chase Manhattan Bank GTS Clients Account Escrow	7,306	5.82%
Saitama Resona Bank, Limited	6,011	4.79%
State Street Bank and Trust Company 505253	4,491	3.57%
Government of Norway	3,101	2.47%
Northem Trust Co (AVFC) Re Iedu Ucits Clients Non Lending 15 PCT Treaty Account	2,706	2.15%
BNY GCM Client Account JPRD ACISG(FE-AC)	2,396	1.90%
Goldman Sachs International	2,294	1.82%
Japan Trustee Services Bank, Ltd. (Trust Account 5)	2,233	1.77%

Note : The Company holds 4,315,618 (3.43%) shares of treasury stock but is excluded from the principal shareholders listed above.

Bonds

Type of bonds	Date of issue	Balance of bonds (in Yen)
The 9th unsecured bonds	June 17, 2015	15,000,000,000
The 10th unsecured bonds	March 15, 2016	15,000,000,000
The 11th unsecured bonds	September 27, 2016	10,000,000,000