



Tokyo Tatemono Yaesu Building, 1-4-16, Yaesu, Chuo-ku, Tokyo 103-0028 Tel: +81-3-5202-8121 (General Affairs Division) https://www.toyodenki.co.jp/





# Our Heart and Technology for the Future

# Toyo Denki Seizo K.K. Contributes to the **Development of Social Infrastructure Systems**

Based on a firm management foundation, we help build social infrastructure systems that are considerate of the global environment through the global provision of high-quality products that integrate our exceptional motor drive technologies since establishment with our breakthrough advanced technologies.

Toyo Denki Seizo K.K. has contributed with new technologies to the development of railways, industries and social infrastructure in Japan and the world. Toyo Denki Seizo K.K. was founded in 1918 in an aim to "domestically manufacture electrical equipment for rail vehicles" and has celebrated the 100th anniversary of its founding in June 2018.

We are developing businesses in transportation, industry and information equipment sectors, and all the three sectors shares a high relevancy to society and the public interest. We contribute to the development of industry and enrichment of people's lives through our manufacturing expertise by leveraging high technological skills.

We will continue to promote global development and aggressively work to develop advanced technologies befitting the name of "Toyo as a technology company," promote transfer of expertise and skills as well as training of human resources for supporting the development of advanced technologies, and create new businesses. Furthermore, through ensuring compliance and enhancing governance, we will strive to build a solid presence in the world as a manufacturer trusted by all stakeholders.



# **CONTENTS**

Contents/Editorial Policy/Long-Term Vision	1
Consolidated Financial Highlights	2
Message from the President	3
Special Report 1 New Medium-Term	
Management Plan	5
Special Report 2 Shiga Ryuo Plant	6
Special Report 3 100th Anniversary of	
Foundation	7
Business Report	
Transportation Systems Segment	8

mansportation systems segment o
Industrial Systems Segment
Information Equipment Systems Segment 10
Business Development11
Research and Development/Intellectual
Property12
ESG/CSR Report

#### Environment

Initiatives to Protect the Environment 13
Social
With Our Customers15
With Our Suppliers 16
With Our Shareholders and Investors 17
With Our Local Communities

### Governance Corporate Governance

•••• · · · · · · · · · · · · · · · · ·	
Internal Control and Compliance	23
Risk Management	23
Information Security	23
Risk Factors	24
Data	25

21

# **Financial Report**

Financial Review27
Reference Data for Management Indices 28
Consolidated Balance Sheets
Consolidated Statements of Income
and Consolidated Statements of
Comprehensive Income
Consolidated Statements of
Changes in Net Assets 32
Consolidated Statements of Cash Flows 33
Company Profile54
Executive Profiles55
Organization Chart 56
Stock Related Information57

#### Editorial Policy

We have been publishing this report since 2013 with the goal of allowing a wide range of stakeholders to have a better understanding of the Company. This report combines our management policy with reports on our businesses, CSR and finances. We are committed to describing our initiatives during the year and our future direction in a manner that is easy to understand.

#### Period Covered by This Report

This report focuses on our activities in fiscal 2017 (from June 2017 to May 2018), but also contains some information from outside this period.

#### Organizations Covered by This Report

This report covers the Toyo Denki Group, including Toyo Denki Seizo K.K. and its consolidated subsidiaries

# Reference Guidelines

Global Reporting Initiative (GRI) "Sustainability Reporting Guidelines Version 4"

# **Consolidated Financial Highlights**

Highlights of Toyo Denki Seizo K.K. and Consolidated Subsidiaries for the Consolidated Fiscal Year ended May 31 or as of May 31

\_\_\_\_\_

Fiscal term	153	154	155	156	157
	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017
					(Unit: Million yer
Fiscal Year					
Net sales	34,957	39,617	39,746	40,668	42,527
Gross profit	8,097	9,282	9,119	9,221	8,072
Operating income	1,076	1,596	1,638	1,571	366
Net income attributable to owners of the parent	644	1,105	889	1,174	692
Comprehensive income	1,421	5,468	(925)	1,513	2,009
Capital investment	612	969	902	4,606	4,772
Research and development costs	665	897	868	927	840
Fiscal Year-End			ľ	ľ	
Net assets	19,350	24,895	23,676	24,603	26,327
Total assets	44,752	53,041	50,233	54,927	63,740
Number of employees	1,201	1,216	1,245	1,262	1,267

Fiscal term	153	154	155	156	157
	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017
					(Unit: Million yen
Fiscal Year					
Net sales	34,957	39,617	39,746	40,668	42,527
Gross profit	8,097	9,282	9,119	9,221	8,072
Operating income	1,076	1,596	1,638	1,571	366
Net income attributable to owners of the parent	644	1,105	889	1,174	692
Comprehensive income	1,421	5,468	(925)	1,513	2,009
Capital investment	612	969	902	4,606	4,772
Research and development costs	665	897	868	927	840
Fiscal Year-End					
Net assets	19,350	24,895	23,676	24,603	26,327
Total assets	44,752	53,041	50,233	54,927	63,740
Number of employees	1,201	1,216	1,245	1,262	1,267

Per Share Information					
Net assets	2,007.25	2,583.04	2,457.05	2,605.09	2,788.01
Net income	66.85	114.72	92.33	123.87	73.33
Dividend	6	6	6	30	50*

Note: Effective as of December 1, 2016, the Company implemented a share consolidation (five shares consolidated into one share). Net assets and net income are calculated on the assumption that the share consolidation was implemented at the beginning of the 152nd fiscal term. Dividends are presented in the actual amounts paid.

\*The dividend for the 157th fiscal term includes a commemorative dividend of 20 yen for the 100th anniversary.

					(Unit: %)		
Major Management Ind	Major Management Indices						
Shareholders' equity ratio	43.2	46.9	47.1	44.8	41.3		
Return on equity (ROE)	3.4	5.0	3.7	4.9	2.7		
Operating income ratio	3.1	4.0	4.1	3.9	0.9		
Overseas net sales ratio	27.3	38.0	32.0	31.1	25.3		
Dividend payout ratio	44.9	26.2	32.5	24.2	68.2		

#### (Unit: Yen)

# Establishing a strong operating system by formulating the new medium-term management plan "Revitalize 2020"

# While net sales were robust and increased year on year, profits decreased. In the fiscal year ending May 31, 2019, we will maintain the net sales level while striving to improve profits.

In the fiscal year ended May 31, 2018, net sales were 42.5 billion yen owing to increases in the Industrial Systems segment and the Information Equipment Systems segment, an all-time high since 2000. As a result of the close examination of profitability, orders received declined from the previous fiscal year to 39.5 billion yen. Operating income was 0.36 billion yen as the Transportation Systems segment and the Industrial Systems segment continued to have unprofitable projects.

Ordinary income and net income attributable to owners of the parent were 0.51 billion yen and 0.69 billion yen, respectively, due to the impact of expenses incurred for integrating all production bases in the Industrial Systems segment at the Shiga Ryuo Plant, despite a gain on sales of investment securities. The overseas net sales ratio was 25.3% due to a decrease in orders received for Chinese high-speed railways as it was the replacement period for rail vehicles.

As for performance by segment, in the Transportation Systems segment, orders received were 25.8 billion yen as orders decreased in Japan. Net sales were 27.9 billion yen due to the decrease in orders for Chinese high-speed railways. Segment income was 2.57 billion yen, owing to the additional treatment of engineering expenses for some overseas projects.

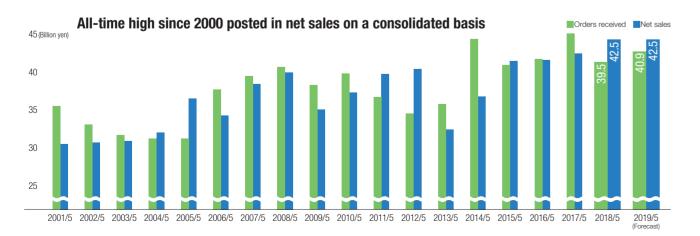
In the Industrial Systems segment, orders received decreased to 11.3 billion yen, as a result of the thorough implementation of the profitability-focused approach for testing equipment for automobile development and orders for power sources. Net sales were 11.7 billion yen, owing to increases in orders for electrical equipment such as processing equipment and printing machines as well as orders for power sources. Segment income was 0.27 billion yen, attributable to the depreciation and amortization of the Shiga Ryuo Plant that was incurred ahead of schedule, and costs of some testing equipment for automobile development that are in progress increasing more than initially expected. With the aim of improving profits, the following initiatives are conducted across all business units: review of the sales management system by model, restructuring of the supply chain, and the strengthening of process management.

In the Information Equipment Systems segment, orders received, net sales, and segment income all increased significantly to 2.4 billion yen, 2.8 billion yen, and 0.31 billion yen, respectively, owing to large-scale projects of composite commuter pass issuing machines that can singlehandedly issue a variety of tickets.

# We will improve our earning power based on the new medium-term management plan and establish a strong operating system that generates steady profits.

In the medium-term management plan "Next 100: Beyond 100 years" that began in the fiscal year ended May 31, 2015, and the medium-term management plan "NEXT 100: Beyond 100 years, Ver. 2" that began in the fiscal year ended May 31, 2017, in view of the years after its 100th anniversary of foundation, the Company adopted a policy of focusing on initiatives aimed to "establish a stable business earnings structure" and to "restructure production system," and promoted measures aimed at strengthening the management foundation, so as to create a Toyo Denki Group befitting of the new era.

As a result, we made progress in the restructuring of the production system in Japan, including consolidating bases in the Industrial Systems segment that were divided between a part of the Yokohama Plant and the former Shiga Factory (Moriyama, Shiga Prefecture) through the launch of the new "Shiga Ryuo Plant." Furthermore, we advanced foundation building for the Transportation Systems segment in China, such as through the establishment of the joint venture "Chengdu Yonggui Toyo Rolling Stock Equipment Co., Ltd." as the pantograph production base in Chengdu, and making additional investments in "Taiping Zhanyun Automatic Door (Changzhou) Co., Ltd. (Current company name: CHANGZHOU YANGDIAN ZHANYUN TRANSPORT EQUIPMENT Co., Ltd.)," a production base of important components. In addition, the



commercialization of products such as the following are in sight: the super-high-speed, 20,000 rpm dynamo with low-inertia that is compatible with testing equipment for electric vehicles (EVs) development, the flat-type dynamo applicable for autonomous cars development, and the large capacity inverter applicable for overseas markets. Meanwhile, regarding the numerical management targets listed in the medium-term management plan, factors that weaken our earning power remain as issues that we face, especially in terms of profitability improvement and the speed of product development.

Using the above results and issues as our starting point, in line with the 100th anniversary of our founding, we reexamined our corporate resources once again and, with 2020 as our immediate target, formulated the four-year medium-term management plan "Revitalize 2020" with the fiscal year ending May 31, 2022 as the final year.

We have set the two-year period (fiscal 2018 to fiscal 2019) that forms the first half of the plan as the time to gain a firm footing, where we will focus on the pressing issue of profitability improvement. As for the second half of the plan, we have set the two-year period (fiscal 2020 to fiscal 2021) as the time to realize our growth with the aim of achieving net sales of more than 47.0 billion yen, where we will consider new alliances and M&As, and focus on strategically developing our business, including our overseas business.

In this plan, we have newly added equity in earnings of unconsolidated subsidiaries and affiliates, return on equity (ROE), and dividend payout ratio as numerical management targets. We will aim to achieve equity in earnings of unconsolidated subsidiaries and affiliates of 0.4 billion yen through the expansion of our overseas business, ROE of 5% through building a stable business earnings structure, and realize stable returns to shareholders with a target dividend payout ratio of 30%.

The Company will improve its earning power based on the fundamental policy of this new plan and take a new step towards establishing a strong operating system that generates steady profits.

# The Shiga Ryuo Plant, the new production base of the Industrial Systems segment, began operations in June 2018. Visible results have begun to show immediately after the integration.

We consolidated bases in the Industrial Systems segment that were divided between a part of the Yokohama Plant and the former Shiga Factory (Moriyama, Shiga Prefecture) at the Shiga Ryuo Plant, which began operations in June 2018. By integrating the development, design, and manufacturing functions at this new base, to those outside the Company, our management policy of having Transportation Systems and Industrial Systems as our two main businesses becomes clear. As a result, the Industrial Systems segment has received greater recognition and expectations from customers, leading to an increase in inquiries and site inspections. Within the Company, communication between departments has increased, effects such as boosted employee motivation due to workplace environment improvements have appeared, and with closer cooperation between the design, manufacturing and quality assurance functions owing to the base consolidation, we expect productivity to improve.

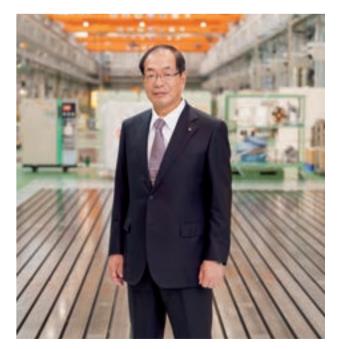
Going forward, we will further advance our research and development efforts in the new R&D building, and strive to provide products that meet the diverse needs of our customers.

# The Company, which views contributing to social infrastructure as its mission, will focus on ESG measures to achieve long-term growth and further raise its position as a specialized manufacturer befitting the name of "Toyo as a technology company."

Since the Company was founded in 1918 in an aim to "domestically manufacture electrical equipment for rail vehicles," it has managed to overcome numerous difficulties and arrive at where it is today owing to the customers, business partners, shareholders, financial institutions, employees, local communities and other stakeholders who have guided and supported the Company tangibly or intangibly. We would like to take this opportunity to express our deepest gratitude to all the above parties.

We operate in the railway transportation business domain, which is of a highly public nature and requires a high level of safety. Through product development and innovation that contributes to environmental loading reduction, based on such keywords as "energy conservation," "high efficiency" and "clean," we aim to be a "company needed by society" and "build a solid position as a specialized manufacturer." At the same time, we will enhance our foundation for growth by pushing forward with utilization of diverse human resources and diverse work styles in order to raise the job satisfaction of employees, those of which are the starting point of value creation cycle of the Company.

Looking ahead, using the motor drive technologies cultivated over a century since our establishment as the main pillar, we will realize a company that is trusted by all stakeholders and live up to their expectations by achieving sustainable development and further raising our position as a specialized manufacturer befitting the name of "Toyo as a technology company."



President, Representative Director Kenzo Terashima

# "Revitalize2020" **New Medium-Term Management Plan**

Toyo Denki Group today announced revisions to the "Next 100: Beyond 100 years, Ver.2" medium-term management plan announced on July 12, 2016 as described below, in the light of changing business conditions and hurdles that need to be addressed since the previous announcement and the newly developed "Revitalize 2020" medium-term management plan that will come to an end in the fiscal year ending May 31, 2022.

# Gist

**Special** Report

> Based on the fundamental policy under the "Next 100" medium-term management plan, while Toyo Denki Seizo K.K. (hereinafter "Toyo Denki") has promoted reinforcements to its management foundations by taking actions such as commencing operation of the new Shiga Ryuo Plant in June 2018 to commemorate the 100th anniversary of its founding, Toyo Denki still has hurdles that need to be addressed; i.e., improving profitability and accelerating product development. Starting from the results achieved and the hurdles that remain under the "Next 100" plan, as well as are view of its business resources at the 100th anniversary of its founding, Toyo Denki has decided to develop the new "Revitalize 2020" four-year medium-term management plan, which targets 2020 foritsnearest goal.

> Toyo Denki will improve its earning power based on the fundamental policy of this new plan and take a new step towards establishing a strong operating system that generates steady profits.

## Long-term Vision

We will contribute to realizing a social infrastructure system that is friendly to the global environment by providing high-quality products that combine the excellent motor drive technologies we have cultivated since our founding and advanced breakthrough technologies worldwide based on our solid business foundations.

# **Fundamental Policy**

Toyo Denki Group will establish a strong operating system that generates steady profits by strengthening its organizational power and promptly providing high-quality products to our customers.

In the first two years (from the fiscal year ending May 31, 2019 to the fiscal year ending May 31, 2020), which we regard as a period for strengthening our base, we will focus on the pressing issue of improving our profitability. In the latter two years (from the fiscal year ending May 31, 2021 to the fiscal year ending May 31, 2022), which we regard as a period for achieving growth to realize net sales of more than 47 billion yen, we will focus on strategically developing our businesses, including new business alliances and M&As, inside and outside Japan



# Numerical Management Targets (Consolidated)

In order to aggressively promote actions for the medium-term management plan listed above, we will add equity in profit of unconsolidated subsidiaries and affiliates, ROE (Return on Equity) and dividend payout ratio to targets.

Corporate			(Unit: Billions of yen
	Fiscal year ended May 31, 2018 (Results)	Fiscal year ending May 31, 2020 (Plan)	Fiscal year ending May 31, 2022 (Plan)
Net sales	42.527	43.0	Over 47.0
Operating income (Operating margin)	0.366 0.9%	0.9 2.1%	2 4.3%
Ordinary income	0.515	1.1	2.4
Net income	0.692	0.7	1.6
Equity in profit of unconsolidated subsidiaries and affiliates	0.116	0.12	0.4
ROE (Return on Equity)	2.7%	3.3%	5.0%
Dividend payout ratio	<sup>(Note)</sup> 68.2%	30.0%	30.0%

#### Segment net sales

Transportation Systems	27.949	29.0	31.0
Industrial Systems	11.769	13.0	15.0
Information Equipment Systems	2.801	1.0	1.0

(Note) For the fiscal year ended May 31, 2018, we will pay a commemorative dividend of 20 yen per share to mark the 100th anniversary of our founding in addition to the regular dividend of 30 yen per share Dividend payout ratio for the fiscal year ended May 31, 2017 was 24.2%.









# **New factory "Shiga Ryuo Plant**" begins operations

**Special** Report

The "Shiga Ryuo Plant," the new factory constructed in the Shiga Ryuo Industrial Park vicinity, has been completed. The completion ceremony was held on May 28, 2018 where many guests graced us with their presence, and operations began on June 1 of the same year.

Through the launch of the Shiga Ryuo Plant, we consolidated bases in the Industrial Systems segment that were divided between a part of the Yokohama Plant and the former Shiga Factory (Moriyama, Shiga Prefecture), thereby enabling efficient production. Furthermore, we will strengthen our research and development efforts in the new R&D building. The Yokohama Plant will be designated as the base for the Transportation Systems segment, and restructuring of production lines will be conducted with the aim of expanding production capabilities.

Going forward, in the Industrial Systems segment, production capabilities will be raised through improving the operating rate of production lines at the Shiga Ryuo Plant, and we will globally provide high-guality products that utilize our technological capabilities.



# **Celebration of the 100th Anniversary of Foundation**

# Special Report

The Company celebrated the 100th anniversary of its founding on June 20, 2018. This was wholly attributable to the support and patronage we have received from our customers, business partners, shareholders, and industry groups over the years, and we would like to express our sincerest gratitude to them.

Going forward, keeping in mind the dignity of being a "100-year company," the Company will continue contributing to the railway infrastructure and social infrastructure of Japan and countries all over the world.

	Name of ceremony	Celebration of the 100th Anniversary of Toyo Denki Seizo K.K.'s Foundation
l	Date and time	May 16, 2018 (Wednesday), 6:00 -8:00 p.m.
	Venue	Fuji Room, 3F, Imperial Hotel Tokyo
	Number of participants	Around 300

Celebration venue

Presentation of the Company's 100-year history		
	Presentation of the Company's 100-year history	

The state of the state of the

# A cigar case gift that came home to Tovo Denki Seizo after a century

# One day in September 2016, out of the blue, the Company received a letter from the U.K.

The contents of the letter were as follows: "At an auction, I bought a silver cigar case with a carved seal that was a gift from the first president of Toyo Denki Seizo, Mr. Kaichi Watanabe, to an executive of Dick Kerr & Co., Ltd. Is this a piece of memorabilia of your company? I have plans to visit Japan, and I can bring it along if you would like me to.'

As we unraveled the history of the Company, we confirmed that the cigar case was most likely a commemorative gift that our first president, President Watanabe, gave to our technical cooperation partner Dick Kerr & Co., Ltd. a hundred years ago when the Company was founded.

The letter was sent by Mr. Charles and his family, who are fans of Japanese antiques and curios. Apparently, he was mesmerized by the cigar case when he first saw it at the auction and bought it. Subsequently, he noticed the company name and name carved on the back of the case, did some research, and found the Company.



Seine N.N

Cigar case

W. Revinue an Esq. Dr. Raicus Mato Name of the first president, President Watanabe, is carved on the back



# There was a reason behind why he found the Company so quickly.

Even today, President Watanabe, the first president of the Company, is known as a famous technician in the U.K. As he was the designer of the cantilever structure of the Forth Bridge, which is renowned as a World Heritage Site and is also printed on the 20 pound note of Scotland, Mr. Charles recognized the name carved on the cigar case right away.

Although it is not known how President Watanabe presented the gift back in the day, or how the cigar case later ended up at the auction house, it has returned home to Toyo Denki Seizo after a century.

# Transportation Systems Segment

# Support railway transportation that connects people and cities with safety and trust, through manufacturing that merges electronics technologies and mechanical technologies in a highly advanced manner

# **Business Overview**

Electrical equipment for rail vehicles manufactured by the Company using its technological capability developed over about a century covers a wide range of fields, including propulsion systems (drive systems), auxiliary power supply and door-closing units of trains, and we contribute to the maintenance and development of railway infrastructure overseas, not to mention in Japan, by pursuing safety and comfort of trains.

## Results for fiscal 2017

<ul> <li>Orders Received</li> <li>25,866 million yen</li> <li>(Down 11.9% year on year)</li> </ul>	Orders received decreased 11.9% com pared with the previous fiscal year to 25,866 million yen, due to a decrease in Japan despite an increase oversea (China).	
Net Sales 27,949 million yen (Down 0.9% year on year)	Net sales totaled 27,949 million yen largely unchanged from the previous fis cal year, due to a decrease oversea (China) despite an increase in Japan.	
<ul> <li>Segment Income</li> <li>2,578 million yen</li> <li>(Down 16.2% year on year)</li> </ul>	Segment income decreased 16.29 compared with the previous fiscal year to 2,578 million yen, due to the increase in costs of some overseas projects.	

# TOPICS

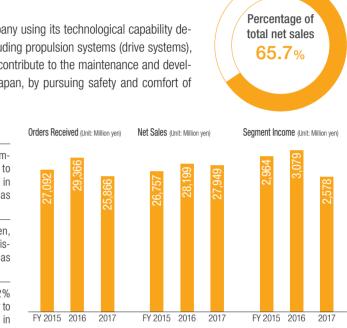
# Establishment of a new Group company "Chengdu Yongqui Toyo Rolling Stock Equipment Co., Ltd." in China -20 years since launching business in China, we are starting a pantograph business

"Yonggui Toyo," the new company established in Chengdu, Sichuan Province in August 2017, finally began its operations. Yonggui Toyo mainly assembles and tests pantographs for urban transit railway vehicles, and will deliver to operators such as the Chengdu Metro. As the population of Chengdu is larger than that of Tokyo and more metro lines will be constructed going forward, business growth is expected.

To further strengthen our business in Chengdu, we made additional investments in Taiping Zhanyun, which previously was engaged mainly in the business of door engines, changed the company name to "Yangdian Zhanyun" and its structure to one that takes on the process of pantograph production. Through such efforts, we have set up the structure of assembly by Yonggui Toyo and components processing by Yangdian Zhanyun for our pantograph business in Chengdu.

Furthermore, Jingche Shuangyang acquired a new operating license, adding "product assembly" to the management scope on top of the maintenance operations conducted to date. At the end of 2017, technicians were dispatched from the Yokohama Plant to the local site and conducted training for pantograph assembly there.

As seen from the above, we are strengthening the cooperation between Group companies, and further expanding the business for urban transit railway vehicles in China.





Training for pantograph assembly at Jingche Shuangyang



Industrial Systems Segment

# Deliver technologies and gratitude to customers with highly precise, highly responding and highly efficient power electronics, for realization of an environment-friendly society

Orders Received (Unit: Million yen)

# **Business Overview**

Results for fiscal 2017

The Company is extensively contributing to customers at home and abroad through general industrial machinery and equipment, testing equipment for automobile development and social infrastructure equipment that is indispensable to the daily lives of people. In addition, we address manufacturing that contributes to the prevention of global warming, while providing products manufactured through high system-building technologies that make full use of energy-saving motors, inverters, FA controllers and networks.

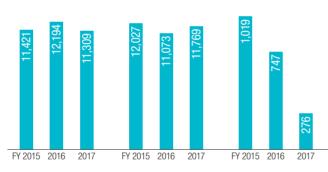


Segment Income (Unit: Million yen)

**BUSINESS** 

<ul> <li>Orders Received</li> <li>11,309 million yen (Down 7.2% year on year)</li> </ul>	Orders received decreased 7.2% compared with the previous fiscal year to 11,309 million yen, due to decreased orders for testing equip- ment and power sources, despite increased orders for electrical equipment such as pro- cessing equipment and printing machines.	11,421
Net Sales 11,769 million yen (Up 6.3% year on year)	Net sales increased 6.3% year on year to 11,769 million yen, due to increased orders for power sources and electrical equipment such as processing equipment and printing machines.	
Segment Income 276 million yen (Down 63.0% year on year)	Segment income totaled 276 million yen, a 63.0% decrease compared with the previous fiscal year, due to the effects of a lower operating rate in line with the transfer to a new factory, and the greater weight of projects where the development element is large, such as testing equipment for automobile develop-	FY 2015 20

ment



Net Sales (Unit: Million yen)

# TOPICS

New products being developed at the Shiga Ryuo Plant

We are developing new products at the new factory that began operations in June 2018.

# Flat-type Dynamo

By evolving the dynamo into a flat-type model that is the same size as an actual tire, it can now fit inside the wheel well of the vehicle body. As a result, the possibilities of its applications are expanding, including in development test for autonomous cars where many sensors are used.







The super-high-speed large-capacity dynamo, which has a rotary part that performs 20,000 rotations per minute, is applicable for development tests of electric vehicles



# Provision of products that make the execution of operations on station premises and trains smooth and convenient and M2M solutions based on mobile phone networks and cloud servers using remote monitoring system

# **Business Overview**

In the Information Equipment Systems segment, we operate in the two fields of railway station operating equipment and remote monitoring systems, by merging advanced telecommunication technologies and mechatronics

With regard to railway station operating equipment systems, we develop and manufacture commuter pass issuing machines that quickly became IC card compliant and portable terminal devices for conductors, and provide systems for smooth toll collection and income management system to railway operators.

Our remote monitoring systems greatly contribute to labor saving and maintenance saving of customers through realization of various equipment monitoring and position monitoring, by leveraging cloud computing.

# **Besults for fiscal 2017**

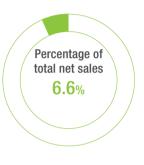
<ul> <li>Orders Received</li> <li>2,416 million yen (Up 35.1% year on year)</li> </ul>	Orders received increased 35.1% com pared with the previous fiscal year to 2,416 million yen, due to the receipt of large-scale order for railway station op erating equipment.
Net Sales 2,801 million yen (Up 101.8% year on year)	Net sales increased 101.8% year on yea to 2,801 million yen for a reason simila to that for increased orders received.
Segment Income 314 million yen (Up 3.1% year on year)	Segment income increased 3.1% com pared with the previous fiscal year to 314 million yen, owing to an increase in net sales, despite the effects of som projects where orders were received strategically.

# TOPICS

The Company delivered a total of some 2,700 in-car supplemental ticket issuing machines to West Japan Railway Techsia Co., Ltd. for use on the Shinkansen lines and existing railway lines of WEST JAPAN RAILWAY COMPANY. Compared with conventional machines, it can not only read but also write on transportation IC cards, it accepts payments by IC cards and credit cards (magnetic stripe) in addition to cash, and English can be printed on tickets for the convenience of foreign visitors.

The machine conforms to the security authorization standards of the Congress of Japan Rai way Cybernetics.

We will continue to develop and provide easier-to-use railway station operating equipment.





Delivery of in-car supplementary ticket issuing machine for WEST JAPAN RAILWAY COMPANY



# **Expansion of New Businesses**

# Order received for consigned research and development of superconducting flywheel power storage system for railways

The Company received an order from East Japan Railway Company to conduct operations related to equipment manufacturing and the preparation of test reports for verification tests of a superconducting flywheel power storage system for railways.

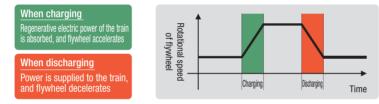
Based on the "Basic Agreement on Technology Development of Superconducting Flywheel Power Storage System for Railways" concluded on March 29, 2018 between Yamanashi Prefecture, the Railway Technical Research Institute, and East Japan Railway Company, this system is being developed for the world's first practical use in the railway field. The Company will conduct the design and manufacturing of the power conversion equipment, and will be responsible for the overall coordination of this power storage system's construction, in cooperation with MIRAPRO Co., Ltd. (Hokuto, Yamanashi Prefecture; President & CEO: Hiroyuki Tsugane)

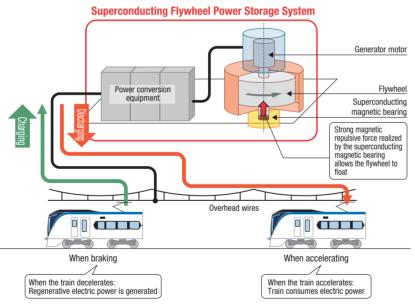
Through this business, the Company will work on the construction of a new power storage system that contributes to the improvement of energy efficiency, the stable usage of renewable energy and technology development in the railway field.

# Superconducting Flywheel Power Storage System for Railways

The flywheel power storage system is a system that, by rotating a large disk (flywheel) within the device, stores regenerative electric power as kinetic energy (charging), and converts kinetic energy back to electric power (discharging) as necessary.

The bearing portion of the superconducting flywheel power storage system adopts the superconductivity technology designed by the Railway Technical Research Institute, and established through verification tests conducted in Komeku rayama, Yamanashi Prefecture. The technology allows the flywheel to float, reducing rotational loss as there is no contact, and realizes a reduction in maintenance efforts





# Announcement of new product IORemoterLTE: IoT terminal for Toyo IoT/M2M solutions/remote monitoring and control systems

The Company has announced IORemoterLTE, a new product that is an IoT terminal for remote monitoring and control systems, for Toyo IoT/M2M solutions.

The IORemoterLTE is a high-speed IoT terminal integrated in the LTE module. Through the use of the Toyo IoT/M2M solutions cloud service, the remote monitoring and control of various facilities, controllers, devices, and mobile entities can be conducted faster and at a larger capacity



**BUSINESS** 

# **Business Report Research and Development/Intellectual Property**

# **R&D** to support the development of social infrastructure and supporting frameworks

# Research and Development

The Group's R&D activities are based on seeking to create products that fully satisfy our customers and challenging the creation and expansion of these products, and we actively promote development of technologies of our existing businesses and basic technology developments that support this development as well as development of new products that expand our businesses.

### Results and topics from fiscal 2017

Segment	Project	
Transportation Systems	Development of electric door- closing unit	Developed electric door- door-closing units of type ing of air-operated door-o
	Right-angle cardan electrical equipment for super low floor type trains	Developed a self-ventilati the aim of reducing noise
Industrial Systems	Development of 20,000 rpm and 350 Nm high-speed motor for automobile testing facilities	Developed a motor with a testing facilities to test or
	Development of inverter compliant with 690 V power sources	Developed a 500 kW-clas overseas.
Information Equipment Systems	Development of IC-exclusive ticket issuing machine	Developing a ticket issuin ets and operate only with
Expansion of New Businesses	Function expansion of remote monitoring unit	Added the new functions the remote maintenance f
	Reduction in size and weight from structural improvements in water-cooled inverter unit	To achieve further reduct circuit structure that app size reduction compared through prototype manufa
Research Laboratory	Development of main motor insulation system for overseas markets	Developed a motor insul priced materials, with the
	Improvement in strength of vehicle cogwheels	Shot peening treatment f improving the reliability, e that shot peening treatme equipment that simulates

# Intellectual Property

Our intellectual property is placed as a key corporate resource. Our intellectual property department is responsible for the management of intellectual property and our research laboratory and the development divisions in each business unit actively apply for patents and utility models.

In the overseas markets which we expect to further expand our businesses, we have started to actively engage in activities concerning our intellectual property in order to protect our technologies and brand

#### Description

-closing units that can be installed in existing spaces (the Company's air-operated e Y2, Y4, etc.), utilizing our many years of experience in the design and manufactur--closing units.

ting main motor with the aim of reducing size and weight, as well as a drive unit with e and the burden of maintenance.

a highest rotational speed of 20.000 rpm and a rated torque of 350 Nm, for use in on-board motors for driving used in electric cars, hybrid cars, etc.

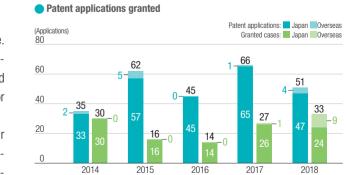
ass inverter unit compliant with 690 V power sources, for use at large-scale facilities

ing machine that is IC-exclusive, as more operators choose not to use magnetic tickh transportation IC cards.

s of Wi-Fi compatibility, routing function within a FOMA-Ethernet, LTE compatibility, and function to the IORemoter, an existing product, and launched it as IORemoterLTE. ctions in size and weight in the water-cooled inverter unit for on-board use, a main plies double-side cooling elements was designed, and it was confirmed that a 70% with conventional models is possible. Going forward, verification will be conducted facturing, and its application in small and light products will be promoted.

ulation system that enables a reduction in man hours and the application of lowne purpose of reducing costs of main motors for rail vehicles overseas.

for vehicle cogwheels is being considered, with the aim of increasing the strength, extending the lifetime, and reducing the weight of vehicle cogwheels. It is confirmed nent increases strength, and final endurance tests are being conducted using testing es actual vehicle cogwheels in action with this treatment applied.



# Initiatives to Protect the Environment

With a view to realizing an environment-friendly society, the Company will further strive to promote the reduction of environmental burden, while providing more efficient products that contribute to energy conservation.

The Toyo Denki Group sets initiatives to protect the global environment as its priority task and contributes to the development of a sustainable society.
We will continue to provide products and services that are considerate of the burden on the global environment by drawing on our "future-oriented technologies friendly to the Earth and mankind."
<ol> <li>We will comply with all environmental requirements including those under the relevant laws and regulations.</li> <li>We will strive to minimize environmental burden through a reduction of energy consumption and other measures at all stages of product lifecycle, namely planning, development, design, production, sales, use and disposal.</li> <li>We will establish and execute a system to continuously promote activities to protect the global environment.</li> <li>We will raise environmental awareness among individuals through enlightenment activities within the Group</li> </ol>

# O Aiming for Realization of a Sustainable Society

A sustainable society as envisaged by the Company is the combination of a "low-carbon society," a "recycling-based society" and a "nature-symbiotic society."

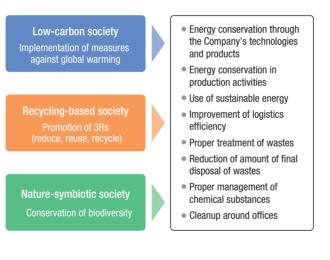
The environment technologies of the Company have produced numerous products that contribute to energy conservation, including high efficiency motors and inverters that capitalize on the amalgamation of our outstanding motor drive technology and other state-of-theart technologies. In the meantime, the Company has been striving to conserve resources through not only the efficient use of energy but also the reduction of the size and weight of its products.

In addition, the Company is working on the development of products with lower levels of noise involved in their use to make them friendlier to the surrounding environment.

The Company will make further contribution to make society more sustainable, fully utilizing on its environmental technologies on a global scale, while carrying out various environmental actions at each of its bases.

# • Environmental Management System

In order to tackle environmental issues on an independent and continuous basis, the Company has developed and operates an environmental management system and thereby obtained ISO 14001 certification. This certification has been acquired for all offices and the production bases Yokohama Plant and Shiga Factory.



#### Years of ISO 14001 certification

Yokohama Plant	Shiga Factory*	Extended to all offices
2004	2001	2010

\*The Company is scheduled to undergo a transition assessment for the transfer and integration from the old Shiga Factory (Moriyama) to the Shiga Ryuo Plant in March 2019.

# O Initiatives to Prevent Global Warming

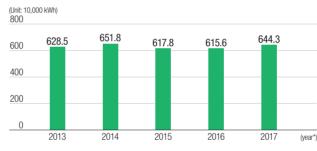
# Initiatives to reduce greenhouse gas (CO<sub>2</sub>) emissions

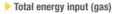
The Company is promoting energy conservation at each of its production bases and offices to reduce its CO<sub>2</sub> emissions. At the production bases in particular, we are promoting power-saving and streamlining at production facilities. In addition, the Yokohama Plant uses solar power generation for peak shaving of power demands.

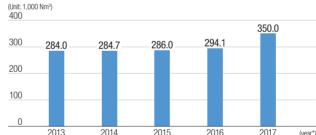
## Targeted reduction of CO<sub>2</sub> emissions and progress status

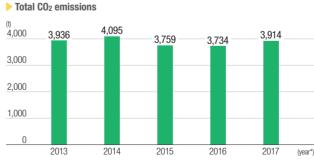
Aiming to reduce CO<sub>2</sub> emissions per unit of production output by 1% year on year, the Company's main production base, the Yokohama Plant, reduced emissions by approximately 7% in fiscal 2017.









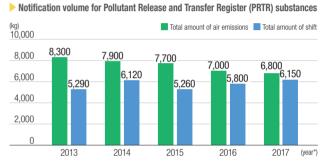


\*The fiscal year is from April to March of the following year \*Figures in the graphs on this page are those of the Yokohama Plant.

# Initiatives for Control over Chemical Substances

Volatile organic compounds (VOCs) emitted as a result of our business activities are adequately controlled and the amount of emission is monitored under the Pollutant Release and Transfer Register (PRTR)

We will further engage in the reduction of waste through such measures including using non-VOC materials and implementing recovery and reuse of solvents. PCB waste is also subject to adeguate control, storage and disposal in accordance with Japan's Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes.

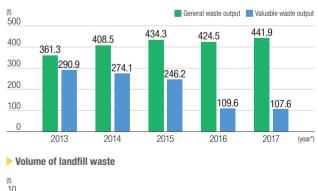


# O Initiatives for Reducing Disposed Waste

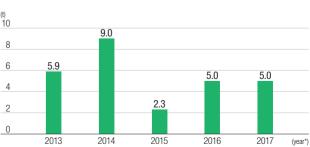
# as Well as Recycling

# Main actions

The Company successfully reduced its landfill waste rate to 0.9% in fiscal 2017, as a result of thoroughly implementing waste processing rules, sorting of metal waste and recycling of paper resources.



# Output of general and valuable waste



# With Our Customers

The Company makes it one of our business principles to "build trust by focusing on quality first." As such, we strive to enhance customer satisfaction through our commitment to thorough-going quality control as we believe delivering safe and secure products and services to customers is the Company's most important mission.

# Quality Control - Providing Safe and High-Quality Products

# **Basic policy on guality control**

The Company's electrical equipment for rail vehicles is installed in many rail vehicles. These extremely important products play a direct role in ensuring the safety of human life and property during rail transportation. In the Industrial Systems and Information Equipment Systems segments as well, the Company's products and services are used in customers' production facilities, development sites and in the field of social infrastructure, and they form the foundation supporting the sustainable development of a society that is safe and comfortable to live in.

In order to ensure the high quality of our products and services, the Company has established a "Basic Policy on Quality Control" which is deployed at all production bases as we strive to maintain and improve our human resources education, compliance with rules, and our facilities.

## Promotion framework

With regard to quality control, each fiscal year the Company develops policies and the promotion framework aimed at further maintaining and improving quality in each business unit, along with specific policies pertaining to the reduction of flaws and other issues. The Company's Corporate Quality Control Division works together with the guality control department or the guality assurance department in each business unit to put together a report on the status of quality control and results in each unit. The report is delivered to top management at the monthly Executive Officer Liaison Meeting where measures are debated and decided. Furthermore, in the event that a flaw is discovered after a product has been shipped, the necessary steps are swiftly taken, mainly by the guality assurance department in each business unit, while at the same time the causes that led to the flaw and its mechanism are investigated, and this information is put into a database so that the information can be shared in-house in an effort to prevent recurrence.

# • Quality management system

The Company has created and operates a quality management system at its production bases, the Yokohama Plant and the Shiga Factory, and has obtained ISO 9001 certification.

#### Year ISO 9001 certification obtained

Yokohama Plant	Shiga Factory*	Extended companywide	
1997	2000	2005	

\*The Company is scheduled to undergo a transition assessment for the transfer and integration from the old Shiga Factory (Moriyama) to the Shiga Ryuo Plant in March 2019.

# • Responding to the Global Market

## **Proper export controls**

The Export Control Department at General Affairs Division is responsible for export management as the export management control department. We have created a system for the proper management of exports in order to ensure compliance with the laws and regulations concerning export management in the countries and regions where we engage in business activities as well as to avoid involvement in transactions that could hinder the maintenance of international peace and safety.

The Export Control Department handles cargo and technology parameters used in determining whether or not export permits are required, as well as investigation of transactions. In addition, the Department carries out employee education and guidance and support for Group companies.

### Acquisition of International Standards

The Company has acquired International Railway Industry Standard (IRIS)\* and China Railway Certification Center (CRCC) certification

Going forward, we will continue to acquire international standards as we aim to further promote global expansion and sales arowth.

\* Acquired for the first time in Japan with our auxiliary power supply (SIV).

# O Towards Greater Customer Satisfaction

## Good Relations with our Customers

Information based on customer opinions and requirements obtained by the sales department is periodically reported to the top management at the executives' briefing sessions, and that information is shared within the Company. We strive to maintain good relations with our customers by identifying problems that need to be solved and swiftly addressing them in order to raise customer satisfaction.

# With Our Suppliers

The Company responds to the needs of our customers through the strong network we have built with suppliers in line with our unique characteristics as a business based on an individual build-to-order/multi-product small lot manufacturing model.

# O Towards Just and Fair Procurement

# Communication with suppliers

The Company endeavors to maintain proper execution of operations by implementing a variety of training programs for material The Company's products possess various distinctive characterisprocurement officers to deepen their knowledge of the Act against tics such as being individually built-to-order, manufactured in Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors multi-product small lots, and demanding high reliability. Therefore, and related laws and regulations and to cultivate awareness of the Company can be affected by the performance of our suppliers legal compliance. as a result of issues such as delays in supply due to fluctuations in production quantity or delays in processing due to the quality of Handling of external whistle-blowing products received.

The Company has established a contact center as stated below to In order to reduce these risks as much as possible, the Comreceive consultations or reports on compliance from our suppliers. pany carries out instruction and support related to quality, techetc. The legal compliance department handles complaints and nology, and skills for our suppliers, as well as guidance for consultations about transactions, and the Company's retained improvement of manufacturing sites, in order to ensure stable lawyer resolves issues when necessary. procurement of even better quality products. In addition, we actively promote information sharing through the "Tovo Denki Cooperation Association" to which our leading suppliers belong.

# Formulation of "Procurement Action Guidelines" (formulated in February 2016)

These quidelines indicate the codes of conduct that the Toyo Denki Group's executives and employees should observe in the procurement of purchased parts and outsourced parts as required for the manufacturing of products ordered by customers ("procurement transactions").

- 1. Procurement transactions shall be carried out in observance of the laws of the relevant countries.
- information gained through procurement transactions.
- 3. Personal interests with suppliers shall be prohibited in procurement transactions, including the lending and borrowing of money.
- be prohibited in procurement transactions.

\* Inquiries from outside are accepted via the following phone number and e-mail address:

# Training for material procurement officers

## **Procurement Action Guidelines**

2. Information concerning suppliers in procurement transactions shall only be obtained within the scope necessary for conducting procurement activities in accordance with contracts. Furthermore, efforts shall be made to carefully manage and observe the confidentiality of

4. Receiving of support beyond the socially accepted practices or receiving of money or inappropriate gifts or any other forms of personal rewards from suppliers shall be prohibited in personal transactions. In addition, forceful requests for any of the above from suppliers shall

Legal Compliance Department, General Affairs Division +81-3-5202-8121 email address for inquiries to Toyo Denki Seizo K.K.: contact@toyodenki.co.jp

# With Our Shareholders and Investors

We strive to ensure transparency of management through the timely and proper disclosure of information and various modes of communication in order to receive an appropriate evaluation of the Company from our shareholders and investors.

# O Towards Enhancement of Corporate Value

# **Basic philosophy**

Through timely and appropriate disclosure of information to our shareholders and investors, the Company accurately conveys our management policy and business conditions while making use of IR tools such as our website to promote a full range of IR activities that contribute to the improvement of our corporate value.

# **Development of IR activities**

**(IR activities for institutional investors and securities analysts)** The Toyo Denki management team holds a financial results briefing each quarterly period to provide opportunities for institutional investors and securities analysts to understand the summary of our financial results. The management team gives a report including the state of progress of the medium-term management plan and an overview and forecast for each segment as well as new orders received and other topics.

In addition, we strive to deepen understanding of the Company through individual visits to institutional investors or holding factory tours to provide opportunities for them to actually see our manufacturing sites, as well as participating in small meetings organized by securities companies, and taking other measures.

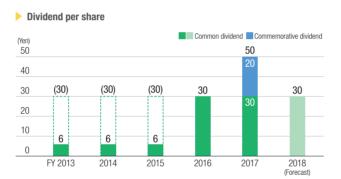
**(IR activities for individual shareholders and individual investors)** The Company website includes a "For Individual Investors" page which offers a clear introduction to our business activities and our results, as well as making available a variety of IR materials.

# URL "For Individual Investors"

https://www.toyodenki.co.jp/ir/individual.php

# Dividends

Maintenance of stable dividends forms the basis of the Company's distribution of profit. In commemoration of the 100th anniversary of our founding, and to express our gratitude to all our shareholders, we added a commemorative dividend of 20 yen to the common dividend of 30 yen per share, and the fiscal year-end dividend for the current fiscal year (fiscal year ended May 31, 2018) was 50 yen per share.



\*Effective as of December 1, 2016, the Company implemented a stock consolidation of its common shares at the ratio of five shares to one share. For the status of dividends before fiscal 2016, the actual dividend amounts before the said stock consolidation are stated. The figures in parentheses are the amounts calculated based on the standard after the stock consolidation.

Record of 157th Ordinary General Meeting of Shareholders Date held: Tuesday, August 28, 2018 Attendance: 77 people

# **Contributions to Local Communities**

We are committed to various social contribution activities, to contribute to society through our business while facilitating our own co-existence with communities and to foster young people who will represent the next generation.

# • To Convey the Mission and Appeal of Electrical Industry as Well as of Toyo Denki

# **Receiving interns**

We are committed to activities that raise awareness and appreciation of our manufacturing expertise by accepting interns from local technical high schools and providing them with hands-on experience at manufacturing sites. This internship system serves as an effective means of recruiting outstanding technical staff on a consistent basis as some students from these schools apply for positions at the Company.

# Participation in university endowment courses and hands-on courses

We participated in endowment courses sponsored by the Yokohama Green Purchasing Network so that participants can deepen their knowledge on history of railway and the environment through our business activities.

We conduct lectures leveraging the know-how fostered through operations and our business activities in on-site training courses held by educational institutions including universities.



Endowment course at a university

# Cooperation with Yokohama Kyodo no Mori Fund

The Company cooperates in small woodlands conservation activities led mainly by the city of Yokohama by donating part of the proceeds from vending machines installed at the Engineering Center of the Yokohama Plant to the fund.

# **Factory tours**

We are conducting "factory tours" to provide opportunities for members of local communities to actually see our manufacturing facilities and products in order to develop deeper understanding about the business operations of the Company. During these tours, we inform the participants of our products as well as our actions for environmental protection and factory facilities, in an effort to build up relationships built on trust with local communities.



A factory tour

# Received the General Manager Prize for the "5th activity commendation that is kind to Kanazawa Ward environment"

In Kanazawa Ward, Yokohama, with the aim of protecting the environment of Kanazawa and passing it on to the next generation, an award is given for environmentally-friendly activities conducted in the ward that are pioneering, exemplary, and has achieved visible results.

This year, the "Joint Cleanup Activity" received the General Manger Prize. The activity has been held once a year since fiscal 2015 and jointly by companies, fire departments, the police, and universities, to collect litter on the streets and illegally disposed waste.

Last year, some 250 people participated and collected around 90 kg of trash.



Participants of Joint Cleanup Activity

# With Our Employees

The Company seeks to cultivate a dynamic corporate culture and to create a pleasant and safe workplace where each and every employee can unleash his or her diverse capabilities.

# • Towards the Development of Human **Resources with Competitive Strengths**

# Human resources development policy

The Company has set the following policy on human resources development and carries out education and training under the education and training system diagram as shown below.

- (1) To develop human resources who understand and practice our business principles and code of conduct and who are of value both as company employees and as members of society.
- (2) To develop human resources who are professionals, each possessing a high degree of specialized expertise, by enhancing the knowledge, techniques, and skills they need to carry out their duties.
- (3) To provide a variety of educational opportunities in order to promote personal development, with emphasis on a self-directed approach to study and growth.

# **Education and training system**

Training programs at the Company are divided into several categories according to the employee's year of service, type of work

#### Education and training system diagram

Practical training for the first year

Basic technical training

On site hands-on learning

Training in business manners

Introductory training

Level-specific education and training (Human Resources Division) Executive training Training for newly appointed division heads Training for third-year managers and profes Training for newly appointed managers and professionals: evaluator training, basic financial training, coaching training Pre-promotion training for managers Comprehensive training for newly appointed senior general staff: basic financial training, coaching training Pre-promotion training for senior general staff Training for workplace overseers: b Instruction (JI), Job Relations (JR), Training With Pre-promotion training for workplace overseers ular new hires Follow-up training (Third year) Follow-up training (Fifth year after graduation from high school) Follow-up training (Second year) Follow-up training (Third year after graduation from high school Follow-up training (First year) Technical education

and role, and training is carried out after clarifying what part each employee is expected to play.

Furthermore, for the purpose of developing human resources that support global development, we offer an overseas trainee program and support for language



Training for new employees courses tailored to the level of participating employees.

To maintain high quality and pass on outstanding technologies and skills, the Company works on education on maintenance and improvement of expertise individually at each division and encourages employees on a company-wide basis to obtain public certifications.

Furthermore, employees with exceptional manufacturing skills or expertise are recognized as "Technical My Star" internally and given responsibility to instruct and train younger employees. At the Technical Training Center, established within the Yokohama Plant, we train our technical staff through lectures, practical training and hands-on workshops.

# Creating a Pleasant Workplace

### Safety and hygiene initiatives

Under the "Company-Wide Safety and Hygiene Management Policv." formulated every fiscal year, the Company holds the Safety and Hygiene Committee monthly at each office, where annual plans are drawn up and ongoing discussions are held in order to build a safe working environment, to reduce workplace injuries to zero and to find solutions to issues, including mental health. In addition, the Company holds the "Company-Wide Safety and Hygiene Committee" every guarter to promote sharing of information between offices as well as between Group companies.

## Acquisition of the "Kurumin" certification logo (June 2014)

In recognition of our efforts as a "company that supports child-rearing," which includes a substantial childcare system, educational activities con-

cerning a work-life balance, the creation of an environment in which it is easy to obtain childcare leave, and the acquisition record of childcare leave by male employees, we received the "Kurumin" certification logo from the Tokyo Labor Bureau in June 2014.

### Initiatives for diverse work-styles

The Company has implemented a flexible work-style including a Response to the Act on Promotion of Women's Participation flextime system for sales staff and those involved in development. and Advancement in the Workplace Furthermore, in order to encourage retention and utilization of In accordance with The Act on Promotion of Women's Participaemployees with knowledge and skills, we have put in place the tion and Advancement in the Workplace (Women's Advancement "System for Rehiring Employees" for employees who have re-Promotion Act) that was enacted on April 1, 2016, the Company signed due to life events that occur in the course of their career is formulating an action plan to create an environment where (childbirth, childcare, family care, spouse's transfer, etc.), so that women can continue working with a sense of security as they adthey can be rehired when they reach the stage when it is possible vance their careers. to return to work.

Ö,

As for employees who wish to be rehired after they reach the mandatory retirement age (60), in principle, we continue to employ them until the age of 65.

Taking childcare leave
---------------------------

### 1 Why did you decide to take childcare leave?

As my wife was not returning to her hometown for the labor. I decided to take the leave.

#### 2Please tell us about how you felt when your child was born.

Although it is mundane, I felt extremely grateful that she was born safely and thought she was really precious.

### **OHOW did you spend the time during your childcare leave?**

I changed my child's diapers, bathed her, bought groceries, cooked for my family and did other housework.

#### **Was there anything that you thought was especially hard for** your wife?

In the first two months after our child was born, my wife had to your child? breastfeed her every two to three hours. A newborn can't drink moth-On weekdays, as my child's waking times are different from mine, I only er's milk very well, and most of all, because our daughter would wake get to see her sleeping before and after I go to work. On weekends. I up every two or three hours feeling hungry, my wife could not get read picture books to my child, and play with her using a rattle. much sleep, and I thought that must have been really hard on her.

# Initiatives for employment of the disabled

The Company makes improvements to the workplace environment and carries out workplace training with the aim of creating a workplace where the disabled and those in normal health can work together energetically. We also hold on-site job experience sessions in collaboration with local governing agencies and special-needs schools regarding employment of the disabled.

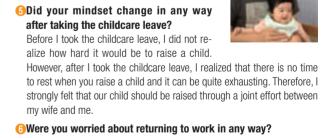
# Mental health measures

As measures to address mental health, the Company conducts "Line care training" for administrative professionals and "Self care training" for employees. In addition, we have partnered with an external medical institution to set up a telephone and e-mail consultation service to provide support for prevention, treatment, and return to work.

# Implementation of employee satisfaction survey

The Company conducts an "employee satisfaction survey" once per year, and relevant departments work to resolve various issues extracted from the survey results. In addition, to create a "dynamic corporate culture," discussion meetings and such between executives and employees are regularly held.

# We interviewed Mr. Shintaro Tanpo, an employee of the Design Division, Transportation Systems Works, who took about two months of childcare leave.



My superior and colleagues assured me that they understood the need for me to take childcare leave, so I did not have any worries.

7 After returning to work, how are you currently interacting with



# Governance

In an effort to continuously enhance its corporate value, the Company is striving to ensure transparency of management and compliance, along with the maintenance and operation of an adequate governance framework while reinforcing its risk management framework.

		0.00		
Б	нын	less	PIII	1243
-	cienti			

# Code of Conduct

businessman

1. Respond to customers in a timely and speedy manner

3. Continuous efforts toward self-development and skill improvement

4. Keep a broad perspective and influence each other toward growth

5. Act with awareness and pride of a good member of society and

Established in June 2001

2. Tackle all challenges with forethought and creativity

Prioritize ethics and contribute to the prosperity of customers and society as a whole

Encourage creativity and enterprising spirit to meet the challenges of the future

Build trust by focusing on guality first

# • Corporate Governance

# Our philosophy of corporate governance

The Group's business activities are based on the business principles that "prioritize ethics and contribute to the prosperity of customers and society as a whole." We therefore strive to attain sound corporate management through strengthening and reinforcing corporate governance, fully appreciating the significance of compliance based on corporate ethics. At the same time, we review as appropriate our management monitoring system to ensure its conformity to the changes in the business environment including social environment and relevant legislation.

# **Corporate governance**

We have corporate bodies established in accordance with laws and regulations as well as the Articles of Incorporation, including the General Meeting of Shareholders, Directors and the Board of Directors. Statutory Auditors and the Board of Statutory Auditors. and Accounting Auditors. In June this year, to strengthen corporate governance, the supervision and execution functions of the Board of Directors were separated, through the adoption of a structure where the Board of Directors is mainly in charge of governance, and Executive Officers are primarily in charge of business execution. At its regular monthly meetings as well as extraordinary meetings held when appropriate, the Board of Directors, which is composed of seven Directors including two Outside Directors, discusses and decides on important management matters such as reports on Executive Officers' business execution and matters to be decided solely at the discretion of the Board of

Directors, while supervising Executive Officers' business execution. In addition, the Company has meeting bodies including the Management Strategy Meeting and Executive Officer Report Meeting. Through these bodies, specific matters related to their execution of duties and critical management matters including those subject to the deliberation of the Board of Directors are reported to the President by the general managers of business execution departments, deliberated and discussed preliminarily. As for the matters discussed at meetings, matters subject to the deliberation of the Board of Directors are decided by the Board of Directors and other matters are decided by employees with business execution authority through means such as circulars based on the Management Authority Rules.

## Internal audit and statutory auditor's audit

Action plans and results of internal audits are reported to the Board of Directors and Statutory Auditors by the Audit Division, as part of an effort to reinforce corporate governance. Statutory Auditors hold preliminary meetings with Accounting Auditors after the Ordinary General Meeting of Shareholders to exchange opinions regarding the audit plan. Statutory Auditors receive the results of guarterly reviews from Accounting Auditors both verbally and in writing, and confirm their action plans (if required by the reviews) to be taken at a fiscal year-end audit. Statutory Auditors also receive the results of the reviews on the fiscal year-end audit from Accounting Auditors in a statutory document along with verbal reviews. Furthermore, Statutory Auditors are in principle required to be present at inventory taking or on-site inspection at subsidiaries by Accounting Auditors.

# External Statutory Auditors and Outside Directors

The Company has established independence guidelines regarding Meeting of Shareholders (August 28, 2018). We look forward to independence required for a candidate for its Outside Executive. his auditing activities, drawing on his wealth of experience develand appoints Outside Directors and External Statutory Auditors oped in service at financial institutions and his global perspective. who have excellent insight in their areas of expertise. Currently, The Company has appointed Mr. Hirokazu Chinone, Mr. Takashi the Company appointed two Outside Directors and three External Yamagishi and Mr. Yoshinori Kawamura as independent directors Statutory Auditors. Note that each of the External Statutory Audiand registered them as such at Tokyo Stock Exchange, Inc. tors is playing a role to enhance audit functions required by laws and regulations while remaining independent from the Company.

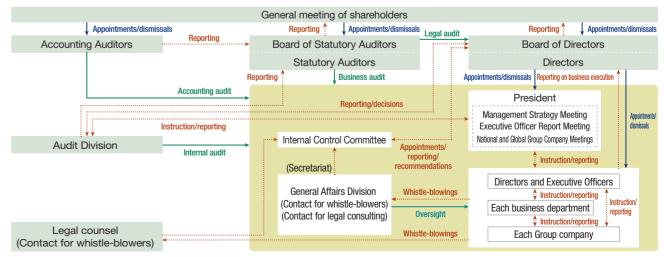
Mr. Hirokazu Chinone, our Outside Director, is gualified as a **Executive Remuneration** lawyer and provides useful advice regarding management in gen-Total amounts of remuneration for Directors and Statutory Auditors are decided by a resolution at the General Meeting of Shareholders. Basic remuneration for Directors is a fixed salary while a Mr. Takashi Yamagishi, our Outside Director, provides useful bonus is payable as determined by each Director's contribution to management as well as business results of the Company. Basic remuneration for both Standing and Part-time Outside Directors and Statutory Auditors is a fixed salary without bonus payments.

eral, drawing on his specialized knowledge regarding corporate law and his wealth of experience developed throughout his career. advice, drawing on his wealth of corporate management experience in Japan and overseas and his superior expertise. In addition, he is a member of the "Nomination and Remuneration Advisory Committee," an advisory body to the Board of Directors regarding the nomination and remuneration of Directors and Executive Officers. (As of the end of May 2018)

Mr. Toshiaki Akechi, our External Statutory Auditor, was newly appointed as an External Statutory Auditor at the 157th Ordinary General Meeting of Shareholders (August 28, 2018). We look forward to his auditing activities, drawing on his wealth of corporate management experience developed thus far.

Mr. Yoshinori Kawamura, our External Statutory Auditor, is engaged in auditing activities, drawing on his expertise regarding corporate finance and accounting developed thus far. He serves as Professor of Faculty of Commerce, Waseda University, with experiences as Secretary and Special Member of the Business (Note) The number of executives applicable mentioned above includes one Director and one Statutory Auditor who retired from office at the end of the 156th Ordinary General Meeting of Sharehold-Accounting Council of the Financial Services Agency, and an ers held on August 29, 2017. examiner of the Certified Public Accountant Examination. etc.

#### Corporate governance framework



Mr. Koji Miki, our External Statutory Auditor, was newly appointed as an External Statutory Auditor at the 157th Ordinary General

Category of executives	Number of executives applicable	Total amount of remuneration (Unit: Million yen)
Directors (excluding Outside Directors)	7	153
Statutory Auditors (excluding External Statutory Auditors)	1	14
Outside Executives (Outside Directors and External Statutory Auditors)	5	40

# Governance

# O Internal Control and Compliance

# Internal Control

The Company views the development and operation of an internal control system to be an important management issue, and it has developed an efficient, legal and appropriate business execution system pursuant to Article 362 of the Companies Act and Article 100 of the Ordinance for Enforcement of the Companies Act. The Internal Control Committee established under the Board of Directors reviews the operational status of the internal control system and will revise it as necessary.

# **Principles of compliance**

The Company has set "1. adherence to rules," "2. observance of confidentiality." "3. distinction between private and public matters," "4. strictness with money," "5. prohibition of side jobs," and "6. prohibition of discriminatory and sexually suggestive statements or behavior" as principles of compliance.

### **Compliance promotion framework**

To focus on business principles and fulfill its social responsibility, the Company has provided all officers and employees with a copy of the Compliance Manual (Toyo Denki Seizo Ethical Standards) that stipulates its code of conduct. The move is part of an effort to have the code and the basic rules of work fully known.

The Company has also introduced a whistle-blowing system that allows employees to provide information directly to the management. The system is aimed at ensuring that any illegal or inappropriate conduct within the Company is detected at the earliest possible stage and that adequate measures are taken promptly and as needed so that such conduct is rectified.

#### **Compliance education**

The Company is organizing scheduled and systematic training sessions based on a compliance training master plan to enhance knowledge on compliance while promoting a conscious respect for corporate ethics.

# Risk Management

# **Basic policy**

The Company is engaged in developing rules and a framework for risk management according to the Basic Rules for Risk Management established in August 2006.

### Promotion framework

The Company has established the Internal Control Committee under the Board of Directors, chaired by the President. It analyzes and assesses all the risks that exist in the Group and develops an effective risk management framework capable of dealing precisely with the risks of the types and degrees that the Group is exposed to. The committee specifically reviews risk verifications and countermeasures, and periodically reports details of its deliberations to the Board of Directors.

Furthermore, the committee is committed to enhancing the Group-wide risk management framework in accordance with the Basic Rules for Risk Management.

# Information Security

# **Basic policy**

The Company holds a vast amount of information assets including information presented by customers related to its business execution and confidential information concerning the Group's proprietary technologies and its trade. Each Group company is taking various measures in this respect based on an awareness of shared security under the Group's Information Security Guidelines, which have been established to adequately manage and use these information assets.

## Information security training

The Company is conducting educational activities to develop information security awareness among all employees including various training sessions, some involving the use of educational DVDs.

# O Risk Factors

The Group proactively pursues the expansion of overseas From the perspective of proactive information disclosure, the operations including the Chinese market. Its performance may Group intends to disclose a wide range of recognizable risks. Mabe affected by major changes in situations overseas. jor risks that may affect its earnings and financial position are set (8) Intellectual property rights out below. The Group aims for thorough understanding of these risks in order to establish a necessary risk management framerights. However, amid drastically advancing technical innovawork designed to prevent the risks from materializing or minimize the impact of risks if they do materialize.

(1) Business activities, business structure, economic trends, and other factors

The Group's sales heavily rely on the Transportation Systems (9) Business alliances and Industrial Systems segments. Its customers conduct busi-With the aim of business expansion and enhancing competiness operations at home and overseas. As such, business tiveness, the Group proactively pursues various alliances with climates and individual spending conditions in different third parties. However, if these alliances do not deliver expectcountries may affect the Group's business performance. ed results due to a failure in forging favorable relationships with partners, the Group may face an impact on its perfor-The great majority of the Group's production bases are located mance.

(2) Production bases

in the Kanto area. Production capacity may be severely affected by large-scale disasters in the area.

(3) Intensifying competition

The Japanese market for the Transportation Systems segment has matured and thus faces intensifying competition. The Industrial Systems segment is under pressure from intensifying competition for product development. The Group's business performance may be affected by such intensifying competition. (4) Product quality

Defects in products may link to materialization of a risk that requires large-scale compensation for damages. The possibility exists that insurance may not be able to cover associated costs, which may affect the Group's business performance. (5) Product development

With a view to providing attractive products to customers, the Group applies itself to gathering information about customer needs and leverages it in the development of new products to support its future growth. However, delays in the development of new products to respond to rapid technological or environmental changes may affect the Group's performance.

(6) Material procurement

Owing to the fact that the Group's business has various distinctive characteristics, some of the materials it procures are not easily available due to factors such as a limited number of suppliers. Delays in supply or discontinuation in production of such materials may affect the Group's performance. In addition, disruptions to the entire supply chain caused by a large-scale disaster or other incidents could impact the Group's operations. Moreover, its business may be affected by the fluctuation in prices of raw materials, notably steel products and copper.

- The Group attends to the protection of intellectual property tions and accelerating globalization of business, the Group is inevitably exposed to potential disputes with third parties over intellectual property rights. If a dispute occurs, the Group's business may be affected.

(10) Exchange rate fluctuations

On the back of aggressive expansion into overseas markets, the Group will inevitably face heavier impact of foreign currency exchange rate fluctuations on its earnings as it increases foreign currency denominated transactions.

(11) Holding assets

Fluctuations in the fair value of assets held by the Group may affect its performance.

(12) Financing

The Group's financing programs may be affected by unexpected changes in financial conditions.

(13) Information security

The Group retains customer information related to its business executions. Also, it possesses various types of confidential information concerning the Group's proprietary technologies and operations. If these information assets leak outside the Group for unforeseeable reasons, it may impact its performance.

(14) Compliance

The Group proactively pursues expansion in overseas operations, particularly the Chinese market; therefore its operations are subject to the laws and regulations of each country. Although the Group has established and conducts a robust compliance system, its operations are still at risk from the effects of unforeseeable events.

(15) Litigation

If the Group becomes the subject of any legal action or other legal procedures, its business may be affected

# Data

# **Data Concerning Personnel and Labor**

### Data concerning personnel and labor (at Toyo Denki Seizo K.K.)

Item		Unit	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017		
	Total		797 *	804 *	824 *	832 *	843 *		
Number of employees	Men	Persons	737	740	761	768	771		
	Women		60	64	63	64	72		
Ratio of female employees		%	7.5	8.0	7.6	7.7	8.5		
	Total		156	151	155	150	140		
Number of administrative professionals	Men	Persons	155	149	151	146	136		
	Women		1	2	4	4	4		
Ratio of female administrative professionals		%	0.6	1.3	2.6	2.7	2.9		
	Overall		41.1	40.5	40.4	40.4	40.2		
Average age	Men	Age	41.2	40.7	40.4	40.4	40.3		
	Women		39.0	38.7	39.5	40.1	39.5		
	Overall		16.3	15.8	15.4	15.2	14.9		
Average years of employment	Men	Years	16.5	15.9	15.5	15.2	15.1		
	Women		14.5	14.5	14.1	14.8	12.7		
Average annual salary		Yen	5,750,453	5,888,577	6,024,175	5,990,250	6,049,512		
Overturn rate (within 3 years of joining the Co	ompany)	%	7.7	0.0	3.4	2.0	2.7		
Number taking childcare leave		Persons	4	5	7	9	4		
Number taking family care leave Pe		Persons	0	0	0	0	0		
Number of temporary staff (including part-timers) Persons		158	153	160	152	130			
Notes			* Number of regular employees incl	* Number of regular employees including Executive Officers, and number of special employees, temporary employees, contract employees and staff on loan from other companies, etc.					

# Reference data I: Number of Officers (at Toyo Denki Seizo K.K.)

Item		Unit	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017
Total			11	12	13	13	12
Number of Officers	Men	Persons	11	12	13	13	12
Women			0	0	0	0	0
Notes			For each fiscal year as of May 31 Executives include Directors and Statutory Auditors (including Internal and External)				

Reference data II: Number of employees at the Group Companies in Japan and overseas (at the 6 consolidated subsidiaries of Toyo Denki Seizo K.K.)

Item	Unit	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017
Number of employees on a consolidated basis	Persons	1,201	1,216	1,245	1,262	1,234
Number of employees at Group companies in Japan and overseas	Persons	404	412	421	430	391
Number of temporary staff on a consolidated basis including part-timers; stated in the Annual Securities Report)	Persons	255	214	274	233	197
Number of temporary staff (including part-timers)	Persons	97	61	114	81	72
Notes		As of May 31 for each f	iscal year			

Reference data III: System for support of work-family balance (at Toyo Denki Seizo K.K.)

	Prenatal leave	Can be taken from 8 weeks prior to due date (14 weeks prior in the case of multiple births). (6 weeks is required by law)
	Maternity leave	Can be taken for up to 8 weeks after the following day of birth.
Maternity and	Childcare leave	In principle, childcare leave can be taken for a period as needed from the day after 8 weeks have elapsed since birth (completion of maternity leave), until the day before the child turns 1 year old. In cases where it is difficult to find a place in daycare, etc., it is possible to apply for an extension of childcare leave until the child is 1 year and 6 months, or until the last day of the month of March after the child has reached the age of 1 year, whichever is longer.
childcare related	Repeat childcare leave (Mom and Dad Childcare Leave Plus)	If an employee has taken childcare leave within 8-week period after his spouse has given birth, he may take repeat childcare leave until the child reaches one year of age. Further if the employee and spouse both take childcare leave, the period of childcare leave can be extended until the child reaches 1 year and 2 months.
	Shorter working hours for childcare	Working hours may be set at 5 hours 45 minutes or 6 hours 45 minutes per day for a period as needed from the end of childcare leave until the child graduates from elementary school.
	Nursing leave	Up to 5 special days off (by day or half day) may be taken per family member each leave year for nursing care for pre-elementary school age children.
	Family care leave	A total of up to 3 years of family care leave may be taken per subject family member, and the leave can be divided into up to 3 parts.
Family care related Family care work hours		Separately from family care leave, employees may use short working hours for family care twice or more during the 3-year period from the starting of use (Working hours may be set at 5 hours and 45 minutes or 6 hours and 45 minutes per day).
Other System for Rehiring Employees		Employees who have resigned due to marriage, infertility treatment, childbirth, childcare, family care, or spouse's transfer, etc., may be rehired when they are able to return to work depending on the employee's request and workplace needs.

# **Environmental Data**

Indices		Applicable premises	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Remarks
Electric power (10,000 kWh)		Production bases total	664.8	684.3	648.8	647.2	680.3	
		Yokohama Plant	628.5	651.8	617.8	615.6	644.3	
		Shiga Factory	36.3	32.5	31.0	31.6	36.0	
		Non-production bases total	27.9	30.1	26.6	26.7	25.2	*1
Solar power generation (kWh)	Based on 500 kW generator	Yokohama Plant	67.5	67.6	63.6	62.8	64.4	*3
		Production bases total	284.0	284.7	286.0	294.1	350.0	
Urban gas (1,000 Nm <sup>3</sup> )		Yokohama Plant	284.0	284.7	286.0	294.1	350.0	
		Shiga Factory	-	-	-	-	-	*2
		Production bases total	14.2	14.1	15.2	15.2	15.2	
Water input (1,000 m <sup>3</sup> )		Yokohama Plant	14.2	14.1	15.2	15.2	15.2	
		Shiga Factory	0.0	0.0	0.0	0.0	0.0	*2
		Production bases total	12.3	14.1	15.2	15.2	15.2	
Water output (1,000 m <sup>3</sup> )		Yokohama Plant	12.3	14.1	15.2	15.2	15.2	
		Shiga Factory	0.0	0.0	0.0	0.0	0.0	*4
		Production bases total	4,122.0	4,265.0	3,924.0	3,895.0	4,097.0	
		Yokohama Plant	3,936.0	4,095.0	3,759.0	3,734.0	3,914.0	
CO <sub>2</sub> emissions (t)		Shiga Factory	186.0	170.0	165.0	161.0	183.0	
		Non-production bases total	168.0	180.0	152.0	158.0	143.0	

# PRTR Data

	Indices		Applicable premises	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Remarks	
	Total amount of air er	missions (kg)		8,300	7,900	7,700	7,000	6,800		
	Total amount of shift	(kg)		5,290	6,120	5,260	5,800	6,150		
		Total amount of	Production bases total	2,000	2,000	2,200	2,400	2,400		
		air emissions	Yokohama Plant	2,000	2,000	2,200	2,400	2,400		
	Ethylbonzono (ka)	all cimissions	Shiga Factory	0	0	0	0	0		
	Ethylbenzene (kg)	Total amount of	Production bases total	430	670	470	600	690		
		shift	Yokohama Plant	430	670	470	600	690		
		Jillit	Shiga Factory	0	0	0	0	0		
		Total amount of	Production bases total	3,300	3,400	2,600	2,100	2,000		
	Xylene (kg)		air emissions	Yokohama Plant	3,300	3,400	2,600	2,100	2,000	
			Shiga Factory	0	0	0	0	0		
Xylene (kg)	Total amount of	Production bases total	360	550	390	400	460			
	PRTR <sup>*5</sup>	shift	Yokohama Plant	360	550	390	400	460		
		Shint	Shiga Factory	0	0	0	0	0		
		Total amount of	Production bases total	0	0	0	0	0		
	Tetrahydromethylphthalic	air emissions	Yokohama Plant	0	0	0	0	0		
	anhydride	all cimissions	Shiga Factory	0	0	0	0	0		
	(kg)	Total amount of	Production bases total	2,900	2,500	2,700	2,800	2,700		
	((19)	shift	Yokohama Plant	2,900	2,500	2,700	2,800	2,700		
		Jinit	Shiga Factory	0	0	0	0	0		
		Total amount of	Production bases total	3,000	2,500	2,900	2,500	2,400		
	Toluene (kg)	air emissions	Yokohama Plant	3,000	2,500	2,900	2,500	2,400		
		un crinical0113	Shiga Factory	0	0	0	0	0		
		Total amount of	Production bases total	1,600	2,400	1,700	2,000	2,300		
		shift	Yokohama Plant	1,600	2,400	1,700	2,000	2,300		
		SIIII	Shiga Factory	0	0	0	0	0		

# Waste Data

	Indices	Applicable premises	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Remarks
		Production bases total	290.3	333.4	355.0	334.1	340.8	
	1 Industrial waste (tons)	Yokohama Plant	262.0	303.1	335.9	308.7	313.3	
		Shiga Factory	28.3	30.3	19.1	25.4	27.5	
		Production bases total	99.3	105.4	98.4	115.8	128.6	
	<ol> <li>General waste (tons)</li> </ol>	Yokohama Plant	99.3	105.4	98.4	115.8	128.6	
		Shiga Factory	-	-	-	-	-	
		Production bases total	290.9	274.1	246.2	109.6	107.6	
	③ Valuable metal waste (tons)	Yokohama Plant	290.9	274.1	246.2	109.6	107.6	
		Shiga Factory	-	-	-	-	-	*6
		Production bases total	680.5	712.9	699.6	559.5	577.0	
Wastes	Waste output (1+2+3) (tons)	Yokohama Plant	652.2	682.6	680.5	534.1	549.5	
		Shiga Factory	28.3	30.3	19.1	25.4	27.5	
		Production bases total	462.4	598.2	584.0	477.2	504.7	
	Recycled amount (tons)	Yokohama Plant	462.4	598.2	584.0	477.2	504.7	
		Shiga Factory	-	-	-	-	-	*6
		Production bases total	5.9	9.0	2.3	5.0	5.0	
	Volume of landfill waste (tons)	Yokohama Plant	5.9	9.0	2.3	5.0	5.0	
		Shiga Factory	-	-	-	-	-	*6
	Bereentage of landfill wants (%)	Production bases total	0.9	1.3	0.8	0.9	0.9	
	Percentage of landfill waste (%) Yearly comparison	Yokohama Plant	0.9	1.3	0.8	0.9	0.9	
	rearry companson	Shiga Factory	-	-	-	-	-	*6

\*2 Production activities at Shiga Factory recorded close to zero water input.

\*3 500 kW solar panel became operational in July 2012.

\*5 PPTR: Pollutant Release and Transfer Register

\*The fiscal year is from April to March of the following year. \*Non-production bases: Toyo Denki Seizo Head Office, Osaka Branch, Nagoya Branch, Hokkaido Branch, Kyushu Branch, Hiroshima Branch \*1 ISO 14001 certification was obtained for non-production bases in June 2010. \*4 Production activities at Shiga Factory recorded close to zero water output.

\*6 The recycled amount and the volume of landfill waste at the Shiga Factory are scheduled for investigation starting in fiscal 2015.

# **FINANCIAL**

# **Financial Report**

# **Reference Data for Management Indices**

Consolidated Operating Results, Consolidated Financial Position, and Consolidated Cash Flow for Fiscal 2017 (from June 1, 2017 to May 31, 2018) are as follows:

# Results of Operation

Orders received YoY -8.7% Net sales

Orders received decreased 8.7% compared with the previous fiscal year to 39,599 million yen due to a decrease in orders received in the Transportation Systems segment and the Industrial Systems segment, despite an increase in the Information Equipment Systems segment



Net sales increased 4.6% compared with the previous fiscal year to 42,527 million yen due to an increase in the Industrial Systems segment and the Information Equipment Systems segment.

Profit/Loss Net Income attributable to owners of the paren YoY -41.0%

From a profit perspective, operating income decreased 1,204 million yen compared with the previous fiscal year to 366 million yen, and ordinary income decreased 1,148 million yen compared with the previous fiscal year to 515 million yen. Net income attributable to owners of the parent decreased 481 million ven to 692 million ven, due to the recording of 806 million yen in gain on sales of investment securities owing to the cutting of some cross-shareholdings, despite 339 million yen of factory integration expenses incurred for the integration between the Industrial Systems segment and TD Drive Co., Ltd.

# Financial Position



Total assets as of May 31, 2018 stood at 63,740 million yen, an increase of 8,813 million yen compared with the end of the previous fiscal year. The increase in total assets was largely attributable to an increase of 3,543 million yen in property, plant and equipment in line with the construction of the Shiga Ryuo Plant, as well as increases of 1,750 million yen in trade notes and accounts receivable and 1,352 million yen in inventories.

Liabilities Total liabilities 37.413 million ver

Total liabilities as of May 31, 2018 stood at 37,413 million yen, an increase of 7,089 million yen compared with the end of the previous fiscal year. This increase was largely attributable to increases of 4,416 million ven in debts and of 1,517 million yen in trade notes and accounts payable.

Net Assets Total net assets 26.327 million ven

Net assets as of May 31, 2018 stood at 26,327 million yen, an increase of 1,723 million yen compared with the end of the previous fiscal year. This increase was largely attributable to a 1,231 million yen increase in unrealized holding gain on available-for-sale securities.

# Cash Flows



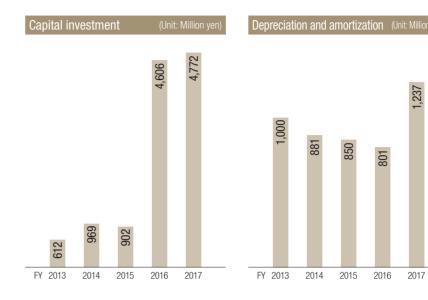
Net cash used in operating activities amounted to 1.572 million ven (net cash of 1.505 million ven provided in the previous fiscal year), principally due to increases in trade notes and accounts receivable and inventories.

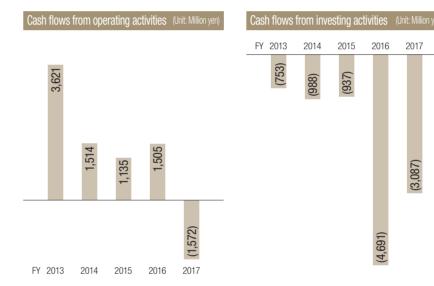


Net cash used in investing activities totaled 3,087 million yen (net cash of 4,691 million yen used in the previous fiscal year), mainly comprising funds used in the purchases of property, plant and equipment, despite an increase in proceeds from sales of investment securities.

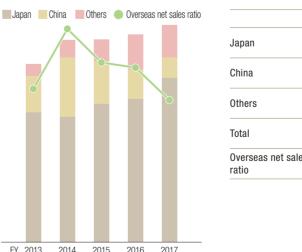
Cash flow from financing activities Net cash provided by financing activities 4,140 million yen

Net cash provided by financing activities was 4,140 million yen (net cash of 2,868 million yen provided in the previous fiscal year), owing to an increase in short-term loans payable.

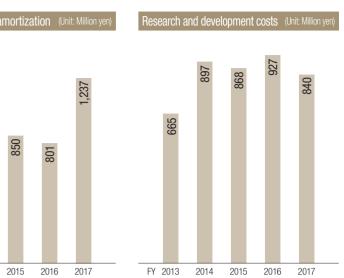




# Net sales by region



FY 2013 2014 2015 2016



\_\_\_\_\_

2014

(988)

2015

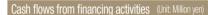
(937)

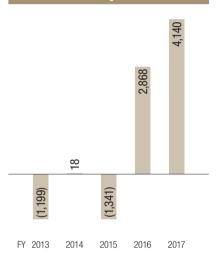
2016

(4, 691)

2017

(3,087)







	FY 2013	2014	2015	2016	2017
	25,398	24,547	27,094	28,006	32,124
	7,118	11,634	8,374	5,882	4,085
	2,440	3,435	4,277	6,778	6,317
	34,957	39,617	39,746	40,668	42,527
es	27.3%	38.0%	32.0%	31.1%	25.3%

# TOYO DENKI SEIZO K.K. Consolidated Balance Sheets

As of		May 31, 2018	May 31, 2017	May 31, 2018
	-	(Millions	s of yen)	(Thousands of U.S. dollars) (Note 2)
Assets				
Current assets:				
Cash on hand and in banks (Notes 16 and 18)		¥ 1,555	¥ 2,091	\$ 14,308
Trade notes and accounts receivable (Note 16)		16,961	15,831	156,032
Electronically recorded receivables (Note 16)		1,153	532	10,604
Inventories (Note 3)		7,832	6,479	72,049
Deferred tax assets (Note 11)		533	577	4,906
Other current assets		1,113	291	10,237
Allowance for doubtful accounts		(2)	(2)	(17)
Total current assets		29,145	25,799	268,119

Property, plant and equipment (Note 4):			
Buildings and structures	7,274	2,705	66,918
Machinery and vehicles	1,432	791	13,177
Land	1,301	1,346	11,971
Construction in progress	321	2,337	2,951
Other	838	444	7,708
Total property, plant and equipment	11,166	7,623	102,725

Investments and other assets (Note 5):				
19,681	18,154	181,060		
11	66	103		
904	1,082	8,322		
2,846	2,216	26,178		
(12)	(12)	(114)		
23,430	21,506	215,549		
V62 7/1	V5/ 028	\$586,393		
	11 904 2,846 (12)	11       66         904       1,082         2,846       2,216         (12)       (12)         23,430       21,506		

As of	May 31, 2018	May 31, 2017	May 31, 2018
	(Millions	(Thousands of U.S. dollars) (Note 2)	
LIABILITIES AND NET ASSETS			(
Current liabilities:			
Trade notes and accounts payable (Note 16)	¥ 4,057	¥ 3,347	\$ 37,327
Electronically recorded payables (Note 16)	6,295	5,489	57,913
Short-term borrowings and current portion of long-term debt (Notes 6 and 16)	7,242	4,970	66,623
Income taxes payable (Note 11)	181	437	1,663
Accrued expenses	841	1,069	7,741
Accrued directors' bonuses	26	33	236
Accrued employees' bonuses	815	953	7,493
Reserve for losses on order acknowledgements (Note 3)	690	366	6,344
Other	2,174	879	19,999
Total current liabilities	22,321	17,543	205,339
Long-term liabilities:			
Long-term debt (Notes 6, 16 and 19)	8,930	6,786	82,154
Deferred tax liabilities (Note 11)	2,206	1,793	20,292
Liability for retirement benefits (Note 7)	3,863	3,913	35,536
Long-term payables	36	158	331
Other	58	131	539
Total long-term liabilities	15,093	12,781	138,852
Commitments and contingencies (Note 14)			
Net assets (Notes 8 and 15):			
Shareholders' equity:			
Common stock	¥ 4,998	¥ 4,998	\$ 45,983
Capital surplus	3,178	3,178	29,232
Retained earnings	10,579	10,170	97,324
Treasury stock	(481)	(478)	(4,418)
Total shareholders' equity	18,274	17,868	168,121
Accumulated other comprehensive income:			
Unrealized holding gain on securities	8,112	6,880	74,619
Translation adjustments	188	157	1,734
Retirement benefits liability adjustments (Note 7)	(247)	(301)	(2,272)
Total accumulated other comprehensive income	8,053	6,736	74,081
Total wat an ata	00.007	04.004	0.40,000

Total net assets

# Total liabilities and net assets

See notes to consolidated financial statements.

242,202

\$586,393

24,604

¥54,928

26,327

¥63,741

# TOYO DENKI SEIZO K.K.

# Consolidated Statements of Income

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018	
	(Million	(Millions of yen)		
Net sales (Note 20)	¥42,527	¥40,668	\$391,235	
Cost of sales (Note 3)	34,454	31,447	316,970	
Gross profit	8,073	9,221	74,265	
Selling, general and administrative expenses (Note 9)	7,706	7,649	70,890	
Operating income (Note 20)	367	1,572	3,375	
Non-operating income (expenses):				
Interest and dividend income	236	228	2,169	
Interest expense	(148)	(123)	(1,366)	
Equity in earnings of unconsolidated subsidiaries and affiliates	116	68	1,068	
Foreign exchange gain (loss)	6	(17)	59	
Other expenses, net	(61)	(64)	(562)	
	149	92	1,368	
Ordinary income	516	1,664	4,743	
Special gains, net (Note 10)	449	44	4,132	
Income before income taxes	965	1,708	8,875	
Income taxes (Note 11):				
Current	333	663	3,059	
Deferred	(60)	(129)	(554)	
	273	534	2,505	
Net income	692	1,174	6,370	
Net income attributable to non-controlling interests				
Net income attributable to owners of the parent	¥ 692	¥ 1,174	\$ 6,370	

\_\_\_\_\_

See notes to consolidated financial statements.

# TOYO DENKI SEIZO K.K. Consolidated Statements of Comprehensive Income

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018	
	(Million	(Millions of yen)		
Net income	¥ 692	¥1,174	\$ 6,370	
Other comprehensive income (Note 12):				
Unrealized holding gain on securities	1,232	410	11,331	
Translation adjustments	(5)	(12)	(43)	
Retirement benefits liability adjustments	54	51	495	
Share of other comprehensive income (loss) of affiliates accounted for				
by the equity method	36	(109)	335	
Total other comprehensive income	1,317	340	12,118	
Comprehensive income	¥2,009	¥1,514	\$18,488	
Comprehensive income attributable to:				
Owners of the parent	¥2,009	¥1,514	\$18,488	
Non-controlling interests				

See notes to consolidated financial statements.

# TOYO DENKI SEIZO K.K. Consolidated Statements of Changes in Net Assets

	(Millions of yen)									
-	Shareholders' equity				Accumulated other comprehensive income					
_	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	Unrealized holding gain on securities	Translation adjustments	Retirement benefits liability adjustments	Total accumulated other comprehensive income	Total net assets
Balance as of June 1, 2016	¥4,998	¥3,178	¥ 9,299	¥(176)	¥17,299	¥6,469	¥ 261	¥(352)	¥6,378	¥23,677
Changes during the year										
Cash dividends paid	_	_	(289)	_	(289)	_	_	_	_	(289)
Net income attributable to owners of the parent	_	_	1,174	_	1,174	_	_	_	_	1,174
Change in scope of equity method application			(14)		(14)					(14)
Purchase of treasury stock			_	(302)	(302)	_	_	_	_	(302)
Net changes in items other than those in shareholders' equity	_	_	_	_	_	411	(104)	51	358	358
Total changes during the year	_	_	871	(302)	569	411	(104)	51	358	927
Balance as of May 31, 2017	¥4,998	¥3,178	¥10,170	¥(478)	¥17,868	¥6,880	¥ 157	¥(301)	¥6,736	¥24,604
	V/4 000	V0 170	1/10 170	>// 470>	147.000	VC 000	V 457	V(001)	VC 700	V04 004
Balance as of June 1, 2017	¥4,998	¥3,178	¥10,170	¥(478)	¥17,868	¥6,880	¥ 157	¥(301)	¥6,736	¥24,604
Changes during the year			(000)		(000)					(000)
Cash dividends paid	—	_	(283)	—	(283)	—	—	—	_	(283)
Net income attributable to owners of the parent	_	_	692	_	692	_	_	_	_	692
Change in scope of equity method application			_		_					_
Purchase of treasury stock	—	—	—	(3)	(3)	—	—	—	—	(3)
Net changes in items other than those in shareholders' equity	_	_	_	_	_	1,232	31	54	1,317	1,317
Total changes during the year	_	_	409	(3)	406	1,232	31	54	1,317	1,723
Balance as of May 31, 2018	¥4.998	¥3.178	¥10,579	¥(481)	¥18.274	¥8,112	¥ 188	¥(247)	¥8.053	¥26,327

	Shareholders' equity			Accur						
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	Unrealized holding gain on securities	Translation adjustments	Retirement benefits liability adjustments	Total accumulated other comprehensive income	Total net assets
Balance as of June 1, 2017	\$45,983	\$29,232	\$93,561	\$(4,394)	\$164,382	\$63,288	\$1,442	\$(2,767)	\$61,963	\$226,345
Changes during the year										
Cash dividends paid	—	—	(2,607)		(2,607)	—	—	—	—	(2,607)
Net income attributable to owners of the parent	_	_	6,370	_	6,370	_	_	_	_	6,370
Change in scope of equity method application	_	_	_	_	_	_	_	_	_	_
Purchase of treasury stock	—	—	—	(24)	(24)	—	—	—	—	(24)
Net changes in items other than those in shareholders' equity		_	_	_	_	11,331	292	495	12,118	12,118
Total changes during the year	_		3,763	(24)	3,739	11,331	292	495	12,118	15,857
Balance as of May 31, 2018	\$45,983	\$29,232	\$97,324	\$(4,418)	\$168,121	\$74,619	\$1,734	\$(2,272)	\$74,081	\$242,202

See notes to consolidated financial statements.

(Thousands of U.S. dollars) (Note 2)

\_\_\_\_\_

# **TOYO DENKI SEIZO K.K Consolidated Statements of Cash Flows**

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018
	(Million	s of yen)	(Thousands of U.S. dollars) (Note 2)
Operating activities			(1000 2)
Income before income taxes	¥ 965	¥ 1,708	\$ 8,875
Depreciation and amortization	1,237	802	11,384
Provision for (reversal of) allowance for doubtful accounts	0	(1)	2
(Reversal of) provision for accrued employees' bonuses	(138)	24	(1,272)
(Decrease) increase in liability for retirement benefits	(46)	61	(428)
Interest and dividends income	(236)	(228)	(2,169)
Interest expenses	148	123	1,366
Gain on sales of investment securities	(807)	(67)	(7,422)
Loss on sales of property, plant and equipment	2	23	23
Loss on consolidation of plants	66		609
Changes in operating assets and liabilities:	00		000
Trade notes and accounts receivable	(1,813)	(1,618)	(16,676)
Inventories	(1,370)	829	(12,607)
Trade notes and accounts payable	1,568	(168)	14,422
Reserve for losses on order acknowledgements	341	70	3,133
Advances received	69	37	631
Accrued expenses	(234)	(182)	(2,149)
Other, net	(670)	158	(6,162)
Subtotal	(918)	1,571	
Interest and dividends income received	(916) 244	236	(8,440)
			2,248
Interest expenses paid	(148)	(118)	(1,366)
Income taxes paid	(751)	(183)	(6,912)
Net cash (used in) provided by operating activities	(1,573)	1,506	(14,470)
Investing activities	(0, 1, 10)	(0,000)	(04 705)
Purchases of property, plant and equipment	(3,448)	(3,902)	(31,725)
Proceeds from sales of property, plant and equipment	79		731
Purchases of intangible assets	(132)	(619)	(1,216)
Purchases of investment securities	(171)	(321)	(1,571)
Proceeds from sales of investment securities	1,100	93	10,121
Payments of loans receivable	(70)	—	(644)
Collection of loans receivable	35	_	322
Payments for investments in capital of subsidiaries and affiliates	(491)		(4,521)
Other, net	11	58	103
Net cash used in investing activities	(3,087)	(4,691)	(28,400)
Financing activities			
Increase in short-term loans payable	2,930	314	26,953
Increase in long-term debt	5,500	3,500	50,598
Repayment of long-term debt	(4,002)	(352)	(36,817)
Purchases of treasury stock	(3)	(302)	(24)
Cash dividends paid	(284)	(290)	(2,609)
Other, net	(1)	(1)	(9)
Net cash provided by financing activities	4,140	2,869	38,092
Effect of exchange rate change on cash and cash equivalents	(16)	6	(152)
Net decrease in cash and cash equivalents	(536)	(310)	(4,930)
Cash and cash equivalents at beginning of period	2,091	2,401	19,238
Cash and cash equivalents at end of period (Note 18)	¥ 1,555	¥ 2,091	\$ 14,308

See notes to consolidated financial statements

# **TOYO DENKI SEIZO K.K.** Notes to Consolidated Financial Statements

# 1. Summary of Significant Accounting Policies

### (a) Basis of presentation

The accompanying consolidated financial statements of TOYO DENKI SEIZO K.K. (the "Company") and consolidated subsidiaries (collectively the "Group") are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards (IFRS), and are compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Act of Japan.

Certain amounts in the prior year's financial statements have been reclassified to conform to the current year's presentation.

(b) Principles of consolidation and accounting for investments in unconsolidated subsidiaries and affiliates directly or indirectly by the Company.

Companies over which the Company exercises significant influence in terms of their operating and financial policies have been accounted for by the equity method. The Company applies the "Practical Solution of Unification of Accounting Policies Applied to Foreign Subsidiaries for Consolidated Financial Statements" (Accounting Standards Board of Japan (ASBJ) Practical Issues Task Force (PITF) No. 18) and "Practical Solution on Unification of Accounting Policies Applied to Associates Accounted for using Equity Method" (PITF No. 24). In accordance with these PITF, the accompanying consolidated financial statements have been prepared by using the accounts of foreign consolidated subsidiaries and affiliates 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 of May 31, 2018, the numbers of consolidated subsidiaries and affiliates accounted for by the equity method were 6 and 3 (6 and 3 in 2017). A subsidiary, TOYO DENKI USA, INC., whose fiscal year end is December 31, is consolidated by using their pro forma financial statements as of March 31 which are prepared solely for consolidation purposes and necessary adjustments are made to their financial statements to reflect any significant transactions from April 1 to May 31. All significant intercompany balances and transactions have been eliminated in consolidation.

Investments in subsidiaries and affiliates which are neither consolidated nor accounted for by the equity method are carried at cost or less. Where there has been a permanent decline in the value of such investments, the Company has written down the investments.

#### (c) Foreign currency translation

Receivables and payables denominated in foreign currencies are translated into yen at the rates of exchange in effect at the balance sheet date, and differences arising from the translation are included in the consolidated statements of income.

The balance sheet accounts of the foreign consolidated subsidiaries are translated into yen at the rates of exchange in effect at the balance sheet date, except for the components of net assets excluding non-controlling interests which are translated at their historical exchange rates. Revenue and expense accounts are translated at the average rate of exchange in effect during the year. Differences arising from the translation are presented as translation adjustments in the consolidated financial statements.

#### (d) Cash and Cash equivalents

Cash and cash equivalents consist of cash on hand, cash in banks which can be withdrawn at any time and short-term investments with a maturity of three months or less from the date of purchase, which can easily be converted to cash and are subject to little risk of change in value.

#### (e) Inventories

Inventories are stated principally at the lower of cost and net realizable value, cost being determined principally by the specific identification method for finished products and work in process and by the moving average cost method for raw material and supplies.

#### (f) Short-term investments and investment securities

Securities other than equity securities issued by subsidiaries and affiliates are classified into three categories: trading, held-tomaturity or other securities (available-for-sale securities). Trading securities are carried at fair value and held-to-maturity securities are carried at amortized cost. Available-for-sale securities with market quotation are carried at fair value with changes in unrealized holding gain or loss, net of the applicable income taxes, included directly in net assets. Available-for-sale securities without market quotation are carried at cost. Cost of securities sold is determined by the moving average method.

# The accompanying consolidated financial statements included the accounts of the Company and any significant companies controlled

# (a) Property. plant and equipment (except for leased assets) and depreciation

Depreciation of property, plant and equipment of the Company and its consolidated subsidiaries is calculated principally by the declining-balance method based on the estimated useful lives and the residual value, while buildings except for facilities attached to buildings acquired on or after April 1, 1998 and facilities attached to buildings and structures acquired on or after June 1, 2016 are depreciated by the straight-line method. The estimated useful lives of these assets are as follows:

Buildings and structures: 8 to 60 vears Machinery and vehicles: 3 to 12 years

Significant renewals and additions are capitalized at cost. Maintenance and repairs are charged to income.

# (h) Intangible assets (except for leased assets)

Intangible assets are amortized using the straight-line method. Software for internal use is amortized over the internal available period (5 years) using the straight-line method.

# (i) Leases

Leased assets capitalized under the finance lease arrangements which do not transfer ownership to the lessee are depreciated over the lease period without any residual value using the straight-line method.

All other lease transactions are accounted for as operating leases and related payments are charged to income as incurred.

## (i) Allowance for doubtful accounts

Allowance for doubtful accounts is provided based on past experience for normal receivables and on an estimate of the collectability of receivables from companies in financial difficulty.

## (k) Accrued directors' bonuses

Accrued directors' bonuses are provided to cover the current fiscal year's portion of the estimated amounts to be paid in future for the performance incentive bonuses.

## (I) Accrued employees' bonuses

Accrued employees' bonuses are provided to cover the current fiscal year's portion of the estimated amounts to be paid in future.

## (m) Reserve for losses on order acknowledgements

Reserve for losses on order acknowledgements is provided based on the amounts expected to be incurred during the current fiscal year and which are able to estimate the losses reasonably to cover the future losses on order acknowledgements. Provision of reserve for losses on order acknowledgements in the amounts of ¥152 million (\$1,398 thousand) and ¥70 million is included in cost of sales for the years ended May 31, 2018 and 2017, respectively.

## (n) Retirement benefits

Retirement benefit obligation is attributed to each period by the benefit formula method over the estimated years of service of the eligible employees.

Prior service cost is amortized as incurred by the straight-line method over a fixed period (10 years) within the average remaining years of service of the employees

Actuarial differences are amortized by the straight-line method over a fixed period (10 years) within the average remaining years of service of the employees from the following year when incurred.

## (o) Income taxes

Deferred tax assets and liabilities have been recognized in the consolidated financial statements with respect to the differences between the financial reporting and tax bases of the assets and liabilities, and were measured using the enacted tax rates and laws which will be in effect when the differences are expected to reverse.

## (p) Construction revenue and costs

Construction revenue and construction costs are recognized by the percentage-of-completion method, if the outcome of a construction contract can be estimated reliably. The percentage of completion is measured based on the percentage of the costs incurred to the estimated total costs. For other construction contracts, the completed-contract method is applied.

(q) Research and development expenses Research and development expenses are charged to income when incurred.

# (r) Consumption taxes

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

## (s) Derivative financial instruments

The Company and certain consolidated subsidiaries enter into various derivative transactions in order to manage certain risks arising from adverse fluctuations in interest rates. Derivative financial instruments are carried at fair value with changes in unrealized gain or loss charged or credited to operations, except for these which meet the criteria for deferred hedge accounting under which unrealized gain or loss is deferred as a component of net assets.

Deferred hedge accounting is adopted for derivatives which gualify as hedges, under which unrealized gain or loss is deferred. Hedging instruments are derivative transactions and hedged items are primarily interest on debts. Hedge effectiveness is not assessed if the substantial terms and conditions of the hedging instruments and the hedged items are the same.

#### (t) Accounting standards issued but not yet adopted

Revised Implementation Guidance on Tax Effect Accounting and Revised Implementation Guidance on Recoverability of Deferred Tax Assets

On February 16, 2018, the ASBJ issued "Revised Implementation Guidance on Tax Effect Accounting" (ASBJ Guidance No. 28) and "Revised Implementation Guidance on Recoverability of Deferred Tax Assets" (ASBJ Guidance No. 26). (1) Overview

The accounting treatment for taxable temporary differences related to investments in subsidiaries in stand-alone financial statements and the treatment of recoverability of deferred tax assets for entities that fall under Category 1 have been revised. (2) Scheduled date of adoption

The Company expects to adopt the revised implementation guidance from the beginning of the fiscal year ending May 31, 2019. (3) Effect of adopting the implementation guidance

The effect of adopting the revised implementation guidance on its consolidated financial statements is insignificant.

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

This is a comprehensive accounting standard for revenue recognition. Specifically, the accounting standard establishes the following five-step model that will apply to revenue from customers:

- 1. Identify the contract(s) with a customer
- 2. Identify the performance obligations in the contract
- 3. Determine the transaction price
- 4. Allocate the transaction price to the performance obligations in the contract
- 5. Recognize revenue when (or as) the entity satisfies a performance obligation (2) Scheduled date of adoption

The Company expects to adopt the accounting standard and implementation guidance from the beginning of the fiscal year ending May 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. U.S. Dollar Amounts

The accompanying consolidated financial statements are expressed in yen, and solely for the convenience of the reader, have been translated into U.S. dollars at the rate of ¥108.70=U.S.\$1, the approximate rate of exchange prevailing at May 31, 2018. This translation should not be construed as a representation that all amounts shown could be converted into U.S. dollars at such rate.

# 3. Inventories

Inventories as of May 31, 2018 and 2017 were as follows:

As of	May 31, 2018	May 31, 2017	May 31, 2018
	(Millions of yen)		
Goods and finished products	¥1,006	¥ 871	\$ 9,256
Work in process	3,507	3,373	32,257
Raw materials and supplies	3,319	2,235	30,536
	¥7,832	¥6,479	\$72,049

Inventories were stated at the lower of cost and net realizable value and the Company recognized losses on write-down of inventories held for the ordinary sales purpose due to a decline in profitability in the amount of ¥75 million (\$686 thousand) and ¥11 million for the years ended May 31, 2018 and 2017, respectively. These amounts were included in "Cost of sales."

Inventories related to construction contracts which are estimated to make losses were stated after deducting the corresponding reserve for losses on order acknowledgements in the following amounts:

<u>As of</u>	May 31, 2018	May 31, 2017	May 31, 2018
	(Million	(Thousands of U.S. dollars)	
Merchandise and finished products	¥ 1	¥46	\$ 7
Work in process	57	41	530
	¥58	¥87	\$537

# 4. Property, Plant and Equipment

The following table sets forth the acquisition costs and related accumulated depreciation:

As of	May 3 2018		May 31, 2017		May 31, 2018
	(Millions of yen)				Thousands of U.S. dollars)
Buildings and structures	¥ 11,9	982	¥ 7,416	;	\$ 110,229
Machinery and vehicles	7,7	742	7,030		71,229
Other	3,9	954	3,364		36,375
	23,0	678	17,810		217,833
Accumulated depreciation	(14,	134)	(13,870)		(130,030)
	¥ 9,5	544	¥ 3,940	1	\$ 87,803

Depreciation of property, plant and equipment for the years ended May 31, 2018 and 2017 were as follows:

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018	
	(Millions of yen)			
	¥1,237	¥802	\$11,384	
	104 ····		1)/10.070	

Accumulated depreciation of property, plant and equipment amounted to ¥14,134 million (\$130,030 thousand) and ¥13,870 million as of May 31, 2018 and 2017, respectively.

# 5. Investments and Other Assets

Investments in unconsolidated subsidiaries and affiliates included in "Investment securities" as of May 31, 2018 and 2017 were as follows:

As of	May 31, May 31, 2018 2017		May 31, 2018	
	(Millions of yen)			
Investments in capital	¥1,980	¥1,345	\$18,218	

### 6. Short-Term Borrowings and Long-Term Debt

As of

Loans, principally from banks Current portion of long-term debt

The annual weighted average interest rates applicable to short-term borrowings and current-portion of long-term debt as of May 31, 2018 were 1.243% and 1.274%, respectively.

As of May 31, 2018 and 2017, long-term debts were as follows:

As of

Long-term debt, excluding current portion, serially due from 201 The annual weighted average interest rate applicable to long-term debt as of May 31, 2018 was 0.494%.

The maturities of long-term debt are summarized as follows:

Years ended May 31	
2019	
2020	
2021	
2022	
2023 and thereafter	

million (\$45,356 thousand) as of May 31, 2018 were as follows:

As of May 31 Buildings and structures Machinery and vehicles Other property, plant and equipment Land

Investment securities

The following assets included in the above are set by factory foundation fixed collateral security:

As of May 31

Buildings and structures Machinery and vehicles Other property, plant and equipment

# As of May 31, 2018 and 2017, short-term borrowings and the current portion of long-term debt consisted of the following:

May 31, May 31, 2018 2017		May 31, 2018
(Million	(Thousands of U.S. dollars)	
¥3,886	¥ 968	\$35,751
3,356	4,002	30,872
¥7,242	¥4,970	\$66,623

	May 31, 2018	May 31, 2017	May 31, 2018
(Millions of yen)			(Thousands of U.S. dollars)
019 through 2032	¥8,930	¥6,786	\$82,154
		0.10.10/	

(Millions of yen)	(Thousands of U.S. dollars)
¥ 3,356	\$ 30,872
509	4,678
557	5,127
525	4,833
7,339	67,517
¥12,286	\$113,027

# The assets pledged as collateral for short-term borrowings of ¥5,132 million (\$47,212 thousand) and long-term debt of ¥4,930

(Millions of yen)	(Thousands of U.S. dollars)
¥ 6,165	\$ 56,717
689	6,338
424	3,901
1,233	11,339
3,468	31,904
¥11,979	\$110,199

(Millions of yen)	(Thousands of U.S. dollars)
¥1,673	\$15,391
689	6,338
424	3,901
¥2,786	\$25,630

# 7. Retirement Benefit Plans

The Company and its consolidated subsidiaries have retirement benefit plans combined by defined contribution plans and lump-sum payment plans.

The Company and its consolidated subsidiaries introduced the point system in the lump-sum payment plans, under which

retirement benefit amounts are computed based on the accumulated points granted according to the job ranking and performances. Under the lump-sum payment plans held by certain consolidated subsidiaries, the liability for retirement benefits and retirement benefit expenses are calculated using a simplified method.

The changes in the retirement benefit obligation during the years ended May 31, 2018 and 2017 were as follows:

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018
	(Millions of yen)		(Thousands of U.S. dollars)
Retirement benefit obligation as of June 1	¥3,913	¥3,853	\$36,000
Service cost	288	284	2,650
Interest cost	15	15	137
Actuarial loss	(4)	(1)	(36)
Retirement benefits paid	(349)	(238)	(3,215)
Retirement benefit obligation as of May 31	¥3,863	¥3,913	\$35,536

The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheets as of May 31, 2018 and 2017 for the Company's and the consolidated subsidiaries' defined benefit plans:

As of	May 31, 2018	May 31, 2017	May 31, 2018
	(Million	s of yen)	(Thousands of U.S. dollars)
Unfunded retirement benefit obligation	¥3,863	¥3,913	\$35,536
Net liability (asset) for retirement benefits on the consolidated balance sheets	3,863	3,913	35,536
Liability for retirement benefits	¥3,863	¥3,913	\$35,536
Net liability (asset) for retirement benefits on the consolidated balance sheets	3,863	3,913	35,536

Note: The plan adopting the simplified method is included.

The components of retirement benefit expenses for the years ended May 31, 2018 and 2017 were as follows:

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018
	(Millions of yen)		(Thousands of U.S. dollars)
Service cost	¥288	¥284	\$2,650
Interest cost	15	15	137
Amortization of actuarial loss	74	73	679
Retirement benefit expenses	¥377	¥372	\$3,466

Retirement benefits liability adjustments included in other comprehensive income (before tax effect) as of May 31, 2018 and 2017 were as follows:

As of	May 31, May 31, 2018 2017		May 31, 2018
	(Millions of yen)		(Thousands of U.S. dollars)
Actuarial gain	¥78	¥74	\$715
Total	¥78	¥74	\$715

Retirement benefits liability adjustments included in accumulated other comprehensive income (before tax effect) as of May 31, 2018 and 2017 were as follows:

# As of

Unrecognized actuarial gain	
Total	

Major actuarial assumptions (weighted average) used in accounting for the above plans as of May 31, 2018 and 2017 were as follows:

# For the Years Ended

Discount rate

Note: The Company does not use the expected rate of salary increase in computing retirement benefit obligation since the Company adopts the point system.

The amounts of the required contribution to the defined contribution plans of the Company and its consolidated subsidiaries were ¥118 million (\$1,084 thousand) and ¥117 million for the years ended May 31, 2018 and 2017, respectively.

### 8. Net Assets

Information regarding changes in net assets for the years ended May 31, 2018 and 2017 was as follows:

a. Shares issued and outstanding/ Treasury stock

For the year ended May 31, 2018

# Type of shares

Shares issued:

Common stock

Treasury stock:

Common stock

Detail of the increase is as the following: Increase due to purchase of shares of less than standard unit

For the year ended May 31, 2017

## Type of shares

Shares issued: Common stock

Treasury stock: Common stock

 Notes: 1. The Company implemented a share consolidation of 5 shares of common stock into 1 share of common stock on December 2. The decrease in the number of shares of common stock issued is due to the share consolidation.
 Details of the changes in common stock under treasury stock are as the following:

 Increase due to purchase of shares of less than standard unit before the share consolidation:
 3,529 shares

 Increase due to purchase of shares of less than standard unit after the share consolidation:
 768 shares

 Decrease is due to the share consolidation.
 952,000 shares

May 31, 2018 (Million	May 31, 2017 s of yen)	May 31, 2018 (Thousands of U.S. dollars)
¥356	¥434	\$3,275
¥356	¥434	\$3,275

May 31, 2018	May 31, 2017
0.4%	0.4%

Number of shares as of June 1, 2017	Increase	Decrease	Number of shares as of May 31, 2018
	(Sha	ares)	
9,735,000	_	_	9,735,000
290,569	1,338	—	291,907
	1,338 sha	ires	
Number of shares as of June 1, 2016	Increase	Decrease	Number of shares as of May 31, 2017
	(Sha	ares)	
48,675,000		38,940,000	9,735,000
493,478	956,297	1,159,206	290,569
tock into 1 share of comi e share consolidation. a:	mon stock on Decer	nber 1, 2016.	
consolidation:	3,529 sha	ires	

b. Dividends

# 1) Dividends paid

# For the year ended May 31, 2018

Resolution	Type of shares	Total dividends (Millions of yen)	Total dividends (Thousands of U.S. dollars)	Dividends per share (Yen)	Dividends per share (U.S. dollars)	Cut-off date	Effective date
Annual general meeting of the shareholders on August 29, 2017	Common stock	¥283	\$2,607	¥30.00	\$0.28	May 31, 2017	August 30, 2017

# For the year ended May 31, 2017

Resolution	Type of shares	Total dividends (Millions of yen)	Dividends per share (Yen)	Cut-off date	Effective date
Annual general meeting of the shareholders on August 26, 2016	Common stock	¥289	¥6.00	May 31, 2016	August 29, 2016

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

		Total dividends (Millions of	Total dividends (Thousands of	Source of	Dividends per	Dividends per share (U.S.	0.1.11	
Resolution	Type of shares	yen)	U.S. dollars)	dividends	share (Yen)	dollars)	Cut-off date	Effective date
Annual general meeting of the shareholders on August 28, 2018	Common stock	¥472	\$4,344	Retained earnings	¥50.00	\$0.46	May 31, 2018	August 29, 2018

# 9. Selling, General and Administrative Expenses

The main components of "Selling, general and administrative expenses" for the years ended May 31, 2018 and 2017 were as follows:

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018
	(Millions of yen)		(Thousands of U.S. dollars)
Salaries and allowances	¥2,006	¥1,975	\$18,458
Provision for accrued directors' bonuses	26	33	236
Provision for accrued employees' bonuses	333	404	3,063
Retirement benefit expenses	213	217	1,963
Provision for allowance for doubtful accounts	0	(1)	2
Research and development expenses	841	927	7,733

# 10. Special Gains (Losses), Net

The components of "Special gains (losses), net" for the years ended May 31, 2018 and 2017 were as follows:

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018	
	(Million	s of yen)	(Thousands of U.S. dollars)	
Special gains:				
Gain on sales of property, plant and equipment	¥ 5	¥—	\$ 46	
Gain on sales of investment securities	807	67	7,422	
Other	3	_	26	
Special losses:				
Loss on consolidation of plants	(340)		(3,127)	
Commemorative project cost for the 100 <sup>th</sup> anniversary of foundation	(18)		(166)	
Loss on sales of property, plant and equipment	(8)	(23)	(69)	
Total	¥ 449	¥ 44	\$ 4,132	

# 11. Income Taxes

Income taxes in Japan applicable to the Company and its domestic consolidated subsidiaries consist of corporation tax, inhabitants' taxes and enterprise tax, which, in the aggregate, resulted in a statutory rate of approximately 30.9% for the years ended May 31, 2018 and 2017. Income taxes of a foreign consolidated subsidiary are based generally on the tax rates applicable in the country of incorporation.

The reconciliation between the effective tax rates reflected in the consolidated statements of income and the effective statutory tax rate for the year ended May 31, 2018 was as follows:

The reconciliation between the effective tax rates reflected in the consolidated statements of income and the effective statutory tax rate for the year ended May 31, 2017 was omitted since the difference was less than 5% of the effective statutory tax rate.

For the Year Ended
Effective statutory tax rate
Effect of:
Non-deductible expenses for income tax purpose
Non-taxable income such as dividends income, etc.
Per capita inhabitant tax
Valuation allowance
Income from affiliates accounted for by the equity method
Difference arising from the rates used by subsidiaries
Tax deductible loss on valuation of shares of affiliates
Other
Effective tax rate

The significant components of deferred tax assets and liabilities as of May 31, 2018 and 2017 were as follows:

As of	May 31, 2018	May 31, 2017	May 31, 2018
	(Millio	ons of yen)	(Thousands of U.S. dollars)
Deferred tax assets:			
Write-down of inventories	¥ 209	¥ 165	\$ 1,923
Liability for retirement benefits	1,188	1,204	10,933
Accrued employees' bonuses	255	301	2,345
Reserve for losses on order acknowledgements	156	115	1,435
Tax loss carryforwards	509	387	4,684
Other	285	431	2,617
Total gross deferred tax assets	2,602	2,603	23,937
Valuation allowance	(655)	(703)	(6,030)
Total deferred tax assets	1,947	1,900	17,907
Deferred tax liabilities:			
Unrealized holding gain on securities	(3,597)	(3,049)	(33,092)
Other	(11)	(1)	(98)
Total deferred tax liabilities	(3,608)	(3,050)	(33,190)
Net deferred tax liabilities	¥(1,661)	¥(1,150)	\$(15,283)

Adjustments to the amounts of deferred tax assets and deferred tax liabilities due to income corporation tax rate change: As the Tax Reform Act was enacted on December 22, 2017 in the U.S., the federal corporation tax rate was reduced from the fiscal year beginning on or after January 1, 2018. Accordingly, the federal corporation tax rate applied to the Company's subsidiaries in the U.S. has been changed from 35% to 21%.

The effect of this tax rate change is insignificant.

May 31, 2018
30.9%
2.0
(1.5)
3.0
10.7
(3.7)
2.2
(17.5)
2.1
28.2%

# 12. Other Comprehensive Income

The following table presents reclassification adjustments and tax effects allocated to each component of other comprehensive income for the years ended May 31, 2018 and 2017:

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018
	(Million:	2011	(Thousands of U.S. dollars)
Unrealized holding gain on securities:			
Amount arising during the year	¥2,587	¥ 669	\$23,795
Reclassification adjustments for gains and losses included in net income	(807)	(67)	(7,422)
Amount before tax effect	1,780	602	16,373
Tax effect	(548)	(192)	(5,042)
Unrealized holding gain on securities	1,232	410	11,331
Translation adjustments			
Amount arising during the year	(5)	(12)	(43)
Amount before tax effect	(5)	(12)	(43)
Translation adjustments	(5)	(12)	(43)
Retirement benefits liability adjustments			
Amount arising during the year	4	0	36
Reclassification adjustments for gains and losses included in net income	74	74	679
Amount before tax effect	78	74	715
Tax effect	(24)	(23)	(220)
Retirement benefits liability adjustments	54	51	495
Share of other comprehensive income (loss) of affiliates accounted for by the equity method			
Amount arising during the year	36	(109)	335
Share of other comprehensive income (loss) of affiliates accounted for by the equity method	36	(109)	335
Total other comprehensive income	¥1,317	¥ 340	\$12,118

# 13. Lease Transactions

The information about finance leases that do not transfer ownership of the leased property to the lessee is omitted since there is no materiality in terms of value.

# 14. Contingent Liabilities

As of May 31, 2018 and 2017, the Company was committed to provide guarantees on bank borrowings of the following affiliates:

As of	May 31, 2018	May 31, 2017	May 31, 2018
	(Millions of yen)		(Thousands of U.S. dollars)
Changzhou Ruiyang Transmission Technology Co., Ltd.	¥198	¥164	\$1,825
Beijing Jingche Shuangyang Traction System Co., Ltd.	85	49	782

# 15. Amounts Per Share

## For the Years Ended

# Net income:

Basic

# As of

## Net assets

Notes: 1. Diluted net income per share is omitted since there is no dilution of equity. 2. The Company implemented a share consolidation of 5 shares of common stock into 1 share of common stock on December 1, 2016. Accordingly, above amounts per share were computed as if the share consolidation had been implemented at the beginning of the fiscal year ended May 31, 2017.

The bases for calculation are as follows:

# Basic net income per share

# For the Years Ended

Net income attributable to owners of the parent Net income not attributable to common shareholders Net income attributable to owners of the parent related to comr

Average number of shares of common stock during the year

# 16. Financial Instruments

# Overview

(1) Policy for financial instruments

The Group raises its necessary funds for capital investments to reinforce and renew production facilities and working capital principally through bank borrowings. The Group manages temporary cash surpluses through low risk financial assets. The Group uses derivatives in order to avoid the following risks and does not enter into derivatives for speculative or trading purposes.

## (2) Types of financial instruments and related risk

Trade receivables—trade notes and accounts receivable and electronically recorded receivables—are exposed to credit risk in relation to customers. Trade receivables denominated in foreign currencies arising from international business are exposed to foreign exchange fluctuation risk, but the Group utilizes forward foreign exchange contracts to reduce such risk as a hedging instrument. Investment securities are composed of mainly the shares of common stock of other companies with which the Group has business

relationships and exposed to market risk.

Certain long-term debt raised for the purpose of making capital investments with variable interest rates is exposed to interest rate fluctuation risk. However, to reduce such risk and fix interest expense for long-term debt bearing interest at variable rates, the Group utilizes interest rate swap transactions as a hedging instrument.

Regarding hedging instruments and hedged items in hedge accounting, hedging policy, and assessment of the effectiveness of hedging activities, etc., please see Note 1(s) "Derivative financial instruments."

May 31, 2018	May 31, 2017	May 31, 2018
(Ye	en)	(U.S. dollars)
¥73.33	¥123.87	\$0.67
May 31, 2018	May 31, 2017	May 31, 2018
(Ye	en)	(U.S. dollars)
¥2,788.01	¥2,605.09	\$25.65

	May 31, 2018	May 31, 2017	May 31, 2018				
	(Millions	s of yen)	(Thousands of U.S. dollars)				
	¥692	¥1,174	\$6,370				
	—	—	—				
nmon stock	692	1,174	6,370				
(Thousand shares)							
	9,443	9,479					

# (3) Risk management for financial instruments

(a) Monitoring of credit risk (the risk that customers or counterparties may default)

In accordance with the internal policies of the Group for managing credit risk arising from receivables, each related division monitors credit worthiness of their main customers periodically, and monitors due dates and outstanding balances by individual customer. In addition, the Group is making efforts to identify and mitigate risks of bad debts from customers who are having financial difficulties.

Investment securities are composed of mainly the shares of common stock of highly rated companies with which the Group has business relationships. Accordingly, the Group believes that the credit risk deriving from such investment securities is insignificant.

The Group also believes that the credit risk of derivatives is insignificant as it enters into derivative transactions only with financial institutions which have a sound credit profile.

(b) Monitoring of market risks (the risk arising from fluctuations in foreign exchange rates, interest rates and others) The Group utilizes interest rate swap transactions to reduce interest rate fluctuation risk on long-term debt.

For investment securities, the Group periodically reviews the fair values of such financial instruments and the financial position of the issuers.

In conducting derivative transactions, the division in charge of each derivative transaction follows the internal policies, which set forth delegation of authority and maximum upper limit on positions. Monthly reports including actual transactions data are submitted to the Board of Directors for their review.

(c) Monitoring of liquidation risk (the risk that the Group may not be able to meet its obligations on scheduled due dates) Based on the report from each division, the Group prepares and updates its cash flow plans on a timely basis to manage liquidation risk.

(4) Supplementary explanation of the estimated fair value of financial instruments

The fair value of financial instruments is based on their quoted market price, if available. When there is no quoted market price available, fair value is reasonably estimated. Since various assumptions and factors are reflected in estimating the fair value, different assumptions and factors could result in different fair value. In addition, the notional amounts of derivatives in Note 19, Derivative Transactions are not necessarily indicative of the actual market risk involved in derivative transactions.

## Estimated Fair value of Financial Instruments

Carrying value of financial instruments on the consolidated balance sheets as of May 31, 2018 and 2017 and estimated fair value are shown in the following table. The following table does not include financial instruments for which it is extremely difficult to determine the fair value (Please refer to Note 2 below):

As of May 31, 2018	Carrying value	Fair value	Difference
		(Millions of yen)	
Assets			
1) Cash on hand and in banks	¥ 1,555	¥ 1,555	¥—
2) Trade notes and accounts receivable	16,961	16,961	—
3) Electronically recorded receivables	1,153	1,153	—
4) Investment securities	18,735	18,735	—
Total assets	¥38,404	¥38,404	¥—
Liabilities			
5) Trade notes and accounts payable	¥ 4,057	¥ 4,057	¥—
6) Electronically recorded payables	6,295	6,295	—
7) Short-term borrowings	3,886	3,886	—
8) Long-term debt	12,286	12,272	14
Total liabilities	¥26,524	¥26,510	¥14
9) Derivative transactions*	¥ —	¥ —	¥—

As of May 31, 2018	Carrying value	Fair value	Difference
	(Th	ousands of U.S. dolla	rs)
Assets			
1) Cash on hand and in banks	\$ 14,308	\$ 14,308	\$ —
2) Trade notes and accounts receivable	156,032	156,032	—
3) Electronically recorded receivables	10,604	10,604	
4) Investment securities	172,360	172,360	_
Total assets	\$353,304	\$353,304	\$ —
Liabilities			
5) Trade notes and accounts payable	\$ 37,327	\$ 37,327	\$ —
6) Electronically recorded payables	57,913	57,913	_
7) Short-term borrowings	35,751	35,751	_
8) Long-term debt	113,027	112,896	131
Total liabilities	\$244,018	\$243,887	\$131
9) Derivative transactions*	\$ —	\$ —	\$

\*Derivative transactions are presented in a net amount of receivables and payables and net payables are shown in parenthesis

As of May 31, 2017	Carrying value	Fair value	Difference
		(Millions of yen)	
Assets			
1) Cash on hand and in banks	¥ 2,091	¥ 2,091	¥—
2) Trade notes and accounts receivable	15,831	15,831	
3) Electronically recorded receivables	532	532	
4) Investment securities	17,209	17,209	
Total assets	¥35,663	¥35,663	¥—
Liabilities			
5) Trade notes and accounts payable	¥ 3,347	¥ 3,347	¥—
6) Electronically recorded payables	5,489	5,489	
7) Short-term borrowings	968	968	_
8) Long-term debt	10,788	10,803	15
Total liabilities	¥20,592	¥20,607	¥15
9) Derivative transactions*	¥ —	¥ —	¥—

\*Derivative transactions are presented in a net amount of receivables and payables and net payables are shown in parenthesis

#### Notes:

1. Methods to determine the estimated fair value of financial instruments and other matters related to securities and derivative transactions Assets:

Cash on hand and in banks, trade notes and accounts receivable and electronically recorded receivables Since these items are settled in a short period of time, their carrying value approximates fair value However, if they are settled in a long period of time, the fair value of receivables is based on the present value of the receivables classified by definite periods discounted using interest rates on the corresponding period until settlement.

Investment securities

"Securities"

### Liabilities:

Trade notes and accounts payable, electronically recorded payables and short-term borrowings Since these items are settled in a short period of time, their carrying value approximates fair value.

#### Lona-term debt

The fair value of long-term debt is based on the present value of the total of principal and interest discounted by the interest rate to be applied if similar new borrowings were entered into. The fair value of long-term debt with variable interest rates, which is hedged by the interest rate swaps and to which hedge accounting is applied (refer to the following paragraph), is based on the present value of the total of principal and interest discounted by the interest rate to be applied if similar new borrowings were entered into.

#### Derivative transactions

The fair value of interest rate swaps accounted for by the hedge accounting is included in the fair value of the related long-term debt, since such interest rate swaps are accounted for together with long-term debt as hedged items. The fair value of interest rate swaps accounted for by the normal method is determined based on the price, etc. provided by the financial institutions.

The fair value of stocks is based on quoted market prices. Investment securities held by the Group are classified as available-for-sale securities and please see Note 17

2. Financial instruments for which it is extremely difficult to determine the fair value

As of	May 31, 2018	May 31, 2017	May 31, 2018	
	(Millions	(Millions of yen)		
Unlisted equity securities	¥946	¥946	\$8,700	
Descuse as guided market arise is sucilable and it is sufremaly difficult to determine the fair value, the	about financial instrum	nanta ara nat inaludad i	a the chouse table	

Because no quoted market price is available and it is extremely difficult to determine the fair value, the above financial instruments are not included in the above table.

3. Redemption schedule for receivables and securities with maturities on May 31, 2018 and 2017 were as follows:

<u>As of May 31, 2018</u>	Due in One Year or Less	Due after One Year through Five Years	Due after Five Years through Ten Years	Due after Ten Years		
		(Million	s of yen)			
Cash on hand and in banks	¥ 1,552	¥ —	¥—	¥—		
Trade notes and accounts receivable	16,593	368	—			
Electronically recorded receivables	1,153					
	¥19,298	¥368	¥—	¥—		
As of May 31, 2018	Due in One Year or Less	Due after One Year through Five Years	Due after Five Years through Ten Years	Due after Ten Years		
	(Thousands of U.S. dollars)					
Cash on hand and in banks	\$ 14,279	\$ —	\$—	\$—		
Trade notes and accounts receivable	152,647	3,385	—	—		
Electronically recorded receivables	10,604	—	—	—		
	\$177,530	\$3,385	\$—	\$—		
As of May 31, 2017	Due in One Year or Less	Due after One Year through Five Years (Million	Due after Five Years through Ten Years s of yen)	Due after Ten Years		
Cash on hand and in banks	¥ 2,088	¥ —	¥—	¥—		
Trade notes and accounts receivable	15,012	819				
Electronically recorded receivables	532					
	¥17,632	¥819	¥—	¥—		

4. The redemption schedule for long-term debt is disclosed in Note 6.

# 17. Securities

Information regarding securities classified as available-for-sale securities

# Available-for-sale securities

<u>As of May 31, 2018</u>	Carrying value	Acquisition cost (Millions of yen)	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost:			
Stock	¥18,618	¥6,906	¥11,712
Subtotal	¥18,618	¥6,906	¥11,712
Securities whose acquisition cost exceeds their carrying value:			
Stock	¥ 117	¥ 121	¥ (4)
Subtotal	¥ 117	¥ 121	¥ (4)
Total	¥18,735	¥7,027	¥11,708
As of May 31, 2018	Carrying value	Acquisition cost Thousands of U.S. dollars	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost:			
Stock	\$171,281	\$63,536	\$107,745
Subtotal	\$171,281	\$63,536	\$107,745
Securities whose acquisition cost exceeds their carrying value:			
Stock	\$ 1,079	\$ 1,113	\$ (34)
Subtotal	\$ 1,079	\$ 1,113	\$ (34)
Total	\$172,360	\$64,649	\$107,711

As of May 31, 2018	Carrying value	Acquisition cost	Unrealized gain (loss)
		(Millions of yen)	
Securities whose carrying value exceeds their acquisition cost:			
Stock	¥18,618	¥6,906	¥11,712
Subtotal	¥18,618	¥6,906	¥11,712
Securities whose acquisition cost exceeds their carrying value:			
Stock	¥ 117	¥ 121	¥ (4)
Subtotal	¥ 117	¥ 121	¥ (4)
Total	¥18,735	¥7,027	¥11,708
As of May 31, 2018	Carrying value	Acquisition cost	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost:	,		,
Stock	\$171,281	\$63,536	\$107,745
Subtotal	\$171,281	\$63,536	\$107,745
Securities whose acquisition cost exceeds their carrying value:			
Stock	\$ 1,079	\$ 1,113	\$ (34)
Subtotal	\$ 1,079	\$ 1,113	\$ (34)
Total	\$172,360	\$64,649	\$107,711
<ol> <li>Notes: 1. Unlisted stocks were not included in the above table because there were no quoted market prices value.</li> <li>Acquisition cost in the above table represents carrying value reflecting impairment losses. If the market value of the securities declines by 50% or more from the acquisition cost as of the the market value and the acquisition cost as an impairment loss. If the decline ranges between al the necessary amount considering its recoverability.</li> </ol>	end of the fiscal year, t	the Group recognizes the	difference betwee

As of May 31, 2017	Carrying value	Acquisition cost	Unrealized gain (loss)
		(Millions of yen)	
Securities whose carrying value exceeds their acquisition cost:			
Stock	¥17,209	¥7,280	¥9,929
Subtotal	¥17,209	¥7,280	¥9,929
Securities whose acquisition cost exceeds their carrying value:			
Stock	¥ —	¥ —	¥ —
Subtotal	¥ —	¥ —	¥ —
Total	¥17,209	¥7,280	¥9,929

ket prices available and they were extremely dif o quo

value.
2. Acquisition cost in the above table represents carrying value reflecting impairment losses.
If the market value of the securities declines by 50% or more from the acquisition cost as of the end of the fiscal year, the Group recognizes the difference between the market value and the acquisition cost as an impairment loss. If the decline ranges between about 30% and 50%, the Group recognizes an impairment loss for the necessary amount considering its recoverability.

# Information regarding available-for-sale securities sold

For the Years Ended	May 31, 2018	May 31, 2017	May 31, 2018	
	(Millions of yen)			
Stock:				
Sales proceeds	¥1,230	¥232	\$11,320	
Gain on sales	807	67	7,422	
Loss on sales			_	

# 18. Supplementary Cash Flow Information

Cash and cash equivalents in the consolidated statements of cash flows for the years ended May 31, 2018 and 2017 were reconciled to cash on hand and in banks in the consolidated balance sheets as follows:

As of	May 31, 2018	May 31, 2017	May 31, 2018
	(Millions of yen)		(Thousands of U.S. dollars)
Cash on hand and in banks	¥1,555	¥2,091	\$14,308
Cash and cash equivalents	¥1,555	¥2,091	\$14,308

# **19. Derivative Transactions**

# Hedging policies

The Company utilizes forward foreign exchange contracts and interest rate swaps for the purpose of hedging its exposure to fluctuations in foreign exchange rates and interest rates, respectively. However, based on internal management rules on financial market risk approved by the Company's Board of Directors, Group companies do not enter into transactions involving derivatives for speculative or trading purposes.

## Types and purpose of derivative transactions

The Company primarily uses forward foreign exchange contracts to hedge against the fluctuations in foreign currency exchange rates on trade receivables denominated in foreign currencies and interest rate swaps to hedge against the adverse impact of fluctuations in interest rates on interest-bearing debt.

Derivative transactions to which hedge accounting is not applied:

# Currency-related derivatives:

As of May 31, 2018 and 2017, there were no currency-related derivatives.

Derivative transactions to which hedge accounting is applied:

# Interest-related derivatives:

# As of May 31, 2018

Interest rate swaps accounted for by the exceptional method: Receive/floating and pay/fixed

# As of May 31, 2018

Interest rate swaps accounted for by the exceptional method: Receive/floating and pay/fixed

Note: Interest rate swaps which qualify for hedge accounting and meet specific mai under the swap agreement is recognized and included in interest expenses. A debt. The notional amount of long-term debt includes current portion of long

# As of May 31, 2017

Interest rate swaps accounted for by the exceptional method: Receive/floating and pay/fixed

Note: Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value, but the differential paid or received under the swap agreement is recognized and included in interest expenses. Accordingly, the fair value of interest rate swaps is included in the fair value of long-term debt. The notional amount of long-term debt includes current portion of long-term debt.

		amount		
	Major hedged item			Fair value
		(Millions	of yen)	
	Long-term debt	¥3,216	¥104	Note
		Notional	amount	
	Major hedged item	Contract amount	Maturing after one year	Fair value
		(Thousands of	U.S. dollars)	
	Long-term debt	\$29,586	\$957	Note
Aco	hing criteria are not re	\$29,586 measured at market val e of interest rate swaps	ue, but the differential	paid or received
Aco	hing criteria are not re cordingly, the fair valu	measured at market val	ue, but the differential is included in the fair	paid or received
Aco	hing criteria are not re cordingly, the fair valu	measured at market val e of interest rate swaps	ue, but the differential is included in the fair	paid or received
Aco	hing criteria are not re cordingly, the fair valu erm debt. Major hedged	measured at market val e of interest rate swaps Notional	ue, but the differential is included in the fair amount Maturing after one year	paid or received value of long-term
Aco	hing criteria are not re cordingly, the fair valu erm debt. Major hedged	measured at market val e of interest rate swaps Notional Contract amount	ue, but the differential is included in the fair amount Maturing after one year	paid or received value of long-term

# 20. Segment Information

The reportable segments of the Group are components for which discrete financial information is available and whose operating results are regularly reviewed by the Board of Directors to make decisions about resource allocation and to assess performance.

The Group establishes business units by product and each business unit designs domestic and overseas comprehensive strategies for its products and is developing business activities. Accordingly, the Group consists of the three reportable segments by product based on the business units, which are Transportation Systems, Industrial Systems and Information Equipment Systems.

The accounting policies of the segments are substantially same as those described in the significant accounting policies in Note 1. Segment profit is evaluated based on operating income.

Inter-segment sales are recorded at the same prices used in transactions with third parties.

	For the year ended May 31, 2018						
	Re	portable segmen	ts				
	Transportation Systems	Industrial Systems	Information Equipment Systems	Other (Note)	Total	Adjustments	Consolidated
				(Millions of yen)			
Sales, profits or losses and asset by reportable segments							
Net sales:							
Sales to third parties	¥27,950	¥11,770	¥2,801	¥ 6	¥42,527	¥ —	¥42,527
Inter-segment sales and transfers	13	2	_	712	727	(727)	_
	27,963	11,772	2,801	718	43,254	(727)	42,527
Segment profit	¥ 2,579	¥ 277	¥ 314	¥ 41	¥ 3,211	¥ (2,844)	¥ 367
Segment assets	¥22,234	¥15,076	¥2,238	¥597	¥40,145	¥23,596	¥63,741
Other items:							
Depreciation	¥ 649	¥ 290	¥ 24	¥ 1	¥ 964	¥ 273	¥ 1,237
Capital expenditures	¥ 747	¥ 3,844	¥ 23	¥ —	¥ 4,614	¥ 158	¥ 4,772

	For the year ended May 31, 2018						
	R	eportable segmer	nts				
	Transportation Systems	Industrial Systems	Information Equipment Systems	Other (Note)	Total	Adjustments	Consolidated
			(Tho	usands of U.S. dolla	ars)		
Sales, profits or losses and asset by reportable segments							
Net sales:							
Sales to third parties	\$257,127	\$108,277	\$25,771	\$ 60	\$391,235	\$ —	\$391,235
Inter-segment sales and transfers	125	17	_	6,542	6,684	(6,684)	_
	257,252	108,294	25,771	6,602	397,919	(6,684)	391,235
Segment profit	\$ 23,725	\$ 2,543	\$ 2,890	\$ 381	\$ 29,539	\$ (26,164)	\$ 3,375
Segment assets	\$204,547	\$138,697	\$20,587	\$5,491	\$369,322	\$217,071	\$586,393
Other items:							
Depreciation	\$ 5,966	\$ 2,672	\$ 218	\$ 12	\$ 8,868	\$ 2,516	\$ 11,384
Capital expenditures	\$ 6,873	\$ 35,363	\$ 212	\$ —	\$ 42,448	\$ 1,457	\$ 43,905
	φ 0,010	φ 00,000	Ψ ΓΙΓ	Ψ	φ ιΞ, ΠΟ	φ 1,101	φ 10,000

Note: "Other" represents business units which are not included in reportable segments and consists of worker dispatching service related activities, etc.

	Re	portable segmen	ts				
	Transportation Systems	Industrial Systems	Information Equipment Systems	Other (Note)	Total	Adjustments	Consolidated
				(Millions of yen)			
Sales, profits or losses and asset by reportable segments							
Net sales:							
Sales to third parties	¥28,200	¥11,073	¥1,388	¥ 7	¥40,668	¥ —	¥40,668
Inter-segment sales and transfers	38	3	_	672	713	(713)	
	28,238	11,076	1,388	679	41,381	(713)	40,668
Segment profit	¥ 3,079	¥ 747	¥ 305	¥ 60	¥ 4,191	¥ (2,619)	¥ 1,572
Segment assets	¥19,926	¥11,791	¥ 817	¥601	¥33,135	¥21,793	¥54,928
Other items:							
Depreciation	¥ 516	¥ 172	¥ 18	¥ 1	¥ 707	¥ 95	¥ 802
Capital expenditures	¥ 518	¥ 3,520	¥ 21	¥ 3	¥ 4,062	¥ 544	¥ 4,606

Note: "Other" represents business units which are not included in reportable segments and consists of worker dispatching service related activities, etc.

# Geographical information

Net sales to third parties by countries or areas grouped according to geographical classification for the years ended May 31, 2018 and 2017 were summarized as follows:

For the Years Ended		May 31, 2018	May 31, 2017	May 31, 2018
		(Million:	(Thousands of U.S. dollars)	
Japan		¥32,125	¥27,987	\$295,535
China		4,085	7,640	37,584
Other		6,317	5,041	58,116
Consolidated		¥42,527	¥40,668	\$391,235

Note: Net sales information above is based on customers' location.

## Major customer information

Major customer information for the year ended May 31, 2018 was omitted since there was no customer to whom sales exceeds 10% of net sales recorded in the accompanying consolidated statements of income.

Major customer information for the year ended May 31, 2017 was as follows:				
Customer	Segment	(Millions of yen)		
Meiji Sangyo Co., Ltd.	Transportation Systems	¥4,640		

# 21. Significant Subsequent Events

There were no significant subsequent events to be noted.

# **Report of Independent Auditors**



Ernst & Young ShinNihon LLC Hibiya Mitsui Tower, Tokyo Midtown Hibiya 1-1-2 Yurakucho, Chiyoda-ku Tokyo 100-0006, Japan

Tel: +81 3 3503 1100 Fax: +81 3 3503 1506 ey.com

### Independent Auditor's Report

The Board of Directors TOYO DENKI SEIZO K.K.

We have audited the accompanying consolidated financial statements of TOYO DENKI SEIZO K.K. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at May 31, 2018, and the consolidated statements of income, comprehensive income, 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 TOYO DENKI SEIZO K.K. and its consolidated subsidiaries as at May 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 2.

Ernst & Young Shin Nihon LLC

August 29, 2018 Tokyo, Japan

A member firm of Ernst & Young Global Limiter

# Company Profile (as of May 31, 2018)

### **Company Profile**

Company Name	TOYO DENKI SEIZO K.K. (TOYO ELECTRIC MFG. CO., LTD.
Established	June 20, 1918
Capital	4,998,390,000 yen
Number of Employees	1,234 (Consolidated) 843 (TOYO DENKI SEIZO K.K.)
Head Office	Tokyo Tatemono Yaesu Building, 1-4-16, Yaesu, Chuo-ku, Tokyo, 103-0028, Japan TEL +81-3-5202-8121 (General Affairs Division) https://www.toyodenki.co.jp/
Stock Exchange Listing	The Tokyo Stock Exchange, First Section
Code Number	6505
Number of Shares Authorized	36,000,000 shares
Number of Shares Issued	9,735,000 shares
Number of Shareholders	5,940

# Subsidiaries and Affiliates (as of September 1, 2018)

TOYOKOUKI Co., I td. Taihei Electric Co.. Ltd Toyo Sangyo Co., Ltd. TD Drive Co., Ltd Toyo Shoji Co., Ltd. TOYO DENKI USA. INC Okinawa Toyo Denki (Beijing) Co., Ltd. Branch CHANGZHOU YANGDIAN ZHANYUN TRANSPORT EQUIPMENT Co., Ltd. Hunan Xiangyang Electric Co., Ltd. Changzhou Ruiyang Transmission Technology Co., Ltd. Chengdu Yonggui Toyo Rolling Stock Equipment Co., Ltd

Beijing Jingche Shuangyang Traction System Co., Ltd.

Beijing Jingche Shuangyang Traction System Co,. Ltd

Changzhou Ruiyang Transmission Technology Co., Ltd. – Covo Denki (Beijing) Co., Ltd. Chengdu Yonggui Toyo Rolling Stock Equipment Co., Ltd. CHANGZHOU YANGDIAN ZHANYUN TRANSPORT EQUIPMENT Co., Ltd. TOYO DENKI SEIZO K.K. DELHI LIAISON OFFICE



\_\_\_\_\_

# Executive Profiles (as of August 28, 2018)

Organization Chart (as of September 1, 2018)



President, Representative Director Kenzo Terashima









\_\_\_\_\_

Director, Senior Managing Director Hiroshi Shimotakahara

Director, Managing Director Kenichi Gotoh

Director, Managing Director Akihiko Ishii



Akira Watanabe



Director (Outside) Hirokazu Chinone Takashi Yamagishi



Director (Outside)



Standing Statutory Auditor Yoshihiko Yoshino



Standing Statutory Auditor Toshiaki Akechi

Statutory Auditor Yoshinori Kawamura



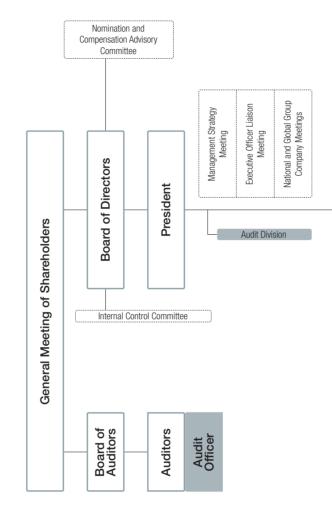
Statutory Auditor Koji Miki

Managing Directors Executive Officers

Shuji Horie Yukimasa Tanabe Kenji Fujiwara

Yoshifumi Otsubo Kenji Tanimoto

Naoki Okuyama Toshihito Nakanishi Shini Furutsuki



Г	Management Planning Department		
Management Planning Division	PR, IR, and CSR Department		
L	Information Systems Department		
Group Administration Office			
General Affairs Division	General Affairs Department		
+	Legal Compliance Department		
L	Export Management Department		
Human Resources Division	Human Resources Department		
L	Education and Development Department		
Financial Affairs Division	Finance Department		
L	Accounting Department		
Corporate Quality Management Division	Planning and Research Department		
-	Quality Management Department 1		
L	Quality Management Department 2		
Corporate Production Planning Division	Production Planning Department		
Purchasing Division	Planning and Research Department		
Business Development Division	Development Promotion Department		
	EV Systems Department		
	IoT Solutions Department		
Г	Transportation Business Planning Division		
Transportation Business Unit	Japan Sales Division		
	JR Group Sales Division		
	Commuter Rail and Subway Sales Division		
	Osaka Sales Division		
	- Nagoya Sales Division		
-	Engineering Division		
	China Sales Division		
_	International Sales Division		
	International Project Division		
	Development Division		
	Transportation Systems Works		
	Production Management Division		
	Design Division		
	— Quality Assurance Division		
	Manufacturing Division		
	Procurement Division		
-	Industrial Systems Planning Division		
Industry Business Unit	Sales Division 1		
	Sales Division 2		
	Sales Division 2		
	Sales Division 4		
	Engineering Division		
	Industrial Systems Works     Production Management Division		
	Production Management Division		
	Development Division		
	Design Division     Ouglity Accuracy Division		
	Quality Assurance Division		
	Manufacturing Division		
	Procurement Division		
IT During of the 't	Information Systems Planning Division		
IT Business Unit	Information Systems Sales Division		
L	Information Systems Works		
	Design Division		
	Quality Assurance Division		
Research Laboratory	Engineering Strategy Division		
_	Engineering Research Division		
	Engineering Management Division		
Yokohama Plant	Administration Division		
Shiga Ryuo Plant	Administration Division		
Osaka Branch			
Nagoya Branch			
	Kyushu Branch		
	Nyuona Branon		

\_\_\_\_\_

# Stock Related Information

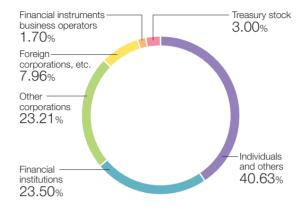
# Number of shares (As of May 31, 2018)

Number of shares authorized	36,000,000
Number of shares issued	9,735,000
Number of shareholders	5,940

# Major shareholders

Shareholders	Number of shares held (Thousands)	% of total shares held
BNP PARIBAS SECURITIES SERVICES LUXEMBOURG/JASDEC/HENDERSON HHF SICAV	489	5.18
East Japan Railway Company	480	5.08
The Master Trust Bank of Japan, Ltd. (Trust account)	443	4.69
TOYOTA INDUSTRIES CORPORATION	420	4.44
Employees Stock Ownership Plan	416	4.41
NIPPON LIFE INSURANCE COMPANY	337	3.57
MUFG Bank, Ltd.	270	2.86
Masayoshi Yamauchi	232	2.46
Toyo Denki Subcontractor Factories Shareholding Association	223	2.37
Hitachi, Ltd.	220	2.33

# Distribution of shares by type of shareholder



# Share consolidation and change to the number of shares constituting one share unit

Effective as of December 1, 2016, the Company implemented a share consolidation (five shares consolidated into one share) and revised the number of shares constituting one share unit (from 1,000 shares to 100 shares).

# Before stock consolidation Stock consolidation (5:1) After stock consolidation (Yen) 3,000 (Yen) 600 400 2,000 ∎д∔⇔≢ҫ҅≁⇔⇔́ 200 1,000 0 Trading volume (Thousands) 15,000 2016.1 2017.1 2018.1 (Thousands) 3,000 10,000 2,000 5,000 1,000 2016.12

# Disclaimer on the forward-looking statements

Information in this corporate report contains forward-looking statements. Such statements were developed based on the information available at the time when this report was prepared. These forward-looking statements may be largely revised in the future, and the actual outcome could significantly vary from the stated or implied contents of such statements subject to various factors. This report is not intended to solicit investment. Investors are kindly asked to make your investment decision at your own judgment and responsibility. Numbers presented in 100 million yen or million yen are rounded down to the nearest respective unit.

(Note) The percentages of total shares held are calculated excluding 291,907 treasury stocks.

# **Transition of share price**

# Share price