

# *Passion for innovation*

## **TAIYO HOLDINGS CO., LTD.**

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## **Annual Report 2019**

Year ended March 31, 2019



**The TAIYO Group** was founded in 1953 to manufacture and sell printing ink and related materials. In 1976, we redirected our business to make solder resists our leading product. Since then, we have grown the solder resist business to obtain the top share of the global market.

In our core business of materials and components for electronic devices, we have complemented solder resists by developing and commercializing lucrative products as we strive to create new business with a focus on chemistry. In addition to energy and food, we started up another new business in 2017 in medical and pharmaceuticals in our continuing search for business opportunities.

In the future, we aim to raise enterprise value as a comprehensive chemical company as we push forward to strengthen the profitability of core businesses and achieve solid growth in new ones.

**Forward- Looking Statements**

This annual report contains forward-looking statements regarding TAIYO HOLDINGS' current management plans, strategies, and other matters. Readers are cautioned that these forward-looking statements contain inherent risks and uncertainties, and may differ materially from actual results.

**Definition of Terms**

"Fiscal 2019" or "Fiscal year 2019 (FY2019)" refers to the fiscal year ended March 31, 2019, and other fiscal years are referred to in a corresponding manner in this annual report.

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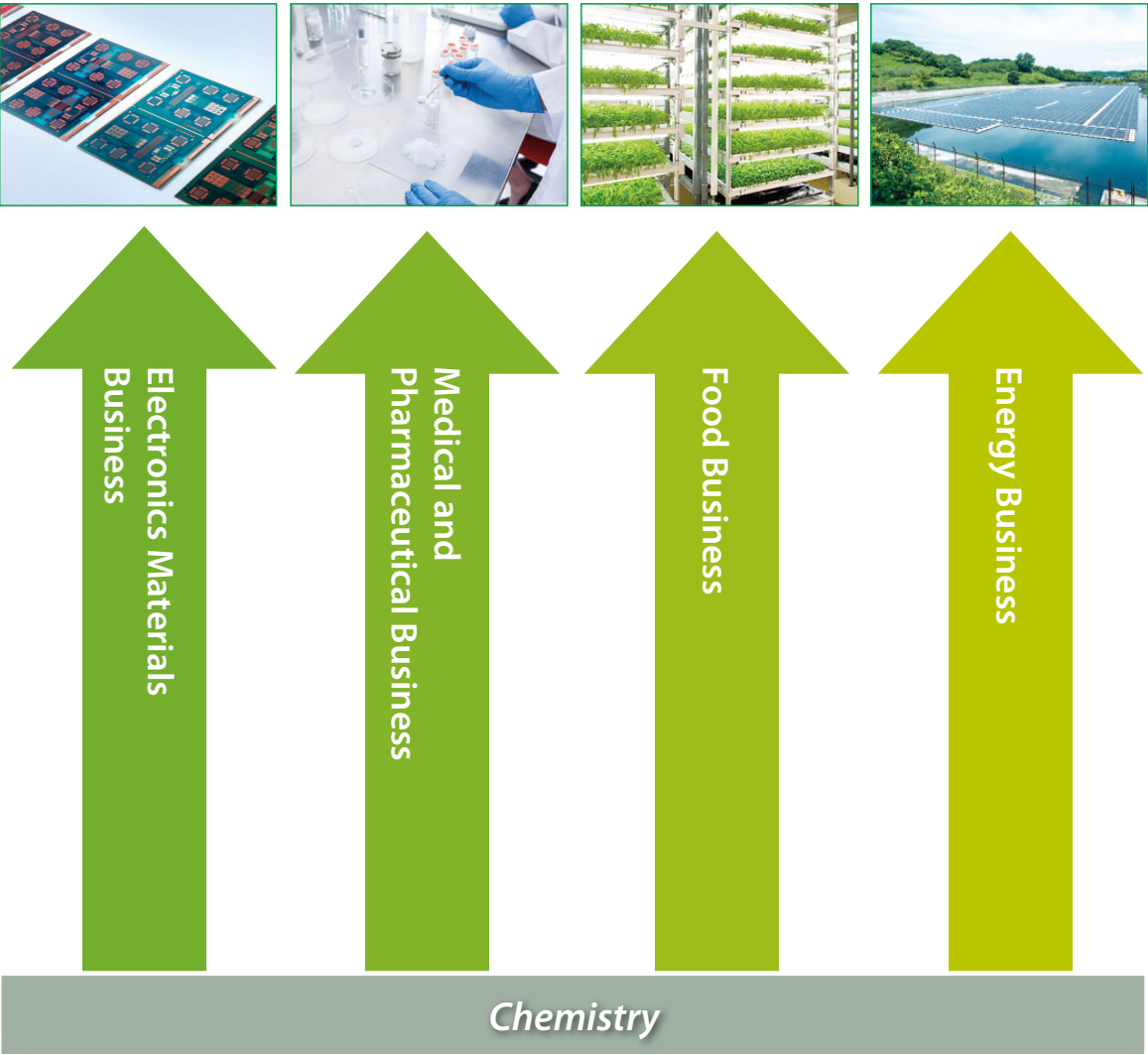
# Profile

Solder resists protect circuit patterns on printed wiring boards (PWBs) from damage caused by dust, heat or other potential factors.

With solder resists that are unmatched in the industry, TAIYO HOLDINGS has established a firm position, boasting the world's largest share of market.

Moving forward, we will continue to expand our new businesses to ensure ongoing corporate growth while using our position as a global and comprehensive chemical company to brightly illuminate the lives of people from future generations.

## Aiming to Be the Global and Comprehensive Chemical Company



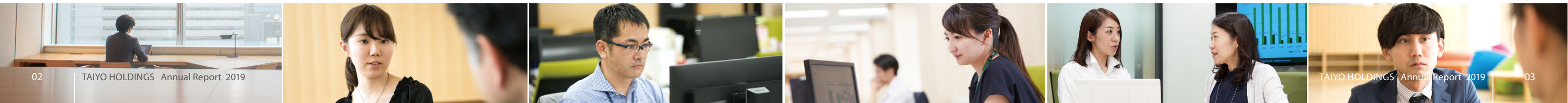
### Management Philosophy

We will realize “a pleasant society” by further advancing “every technology” the Group has and creating a wide range of products to help fulfill the dreams for the whole world with our innovative products.

### Basic Management Policies

TAIYO HOLDINGS CO., LTD. has identified its objectives as a corporate group in the Management Philosophy and Basic Management Policies below. We will develop by continuing the spirit of our Management Philosophy without changes and reviewing our Basic Management Policies to match changes in the environment and strategy on a long-term basis.

- 1 We will generate profit and increase corporate value, thereby contributing to the well-being and prosperity of customers, communities, shareholders, and employees.
- 2 We will discharge our corporate social responsibility with regard to the achievement of our Management Philosophy, including complying with the law, protecting the environment, ensuring thorough quality management, and contributing to society.
- 3 We will leverage our global system to always provide superior products and services.
- 4 We will constantly create opportunities for employees to challenge and develop themselves, aiming to have a corporate group composed of people who are highly motivated to be successful and to achieve goals set by themselves.
- 5 We will increase our comprehensive corporate strengths by maximizing cooperation between the Group companies and strengthen the teamwork of all employees with emphasis on “speed and communication.”
- 6 We aim to have a group of global companies able to contribute to the realization of a pleasant society by constantly working for technological innovation and creating new products and businesses.





# Message from the President and CEO

**The TAIYO Group** is a chemical manufacturer. We boast a world-class market share for solder resist products, which are critical to the printed circuit boards used in all types of electronics, including IT devices such as mobile phones and computers, digital appliances, and vehicle electronics.

TAIYO was established in 1953 as TAIYO INK MFG. CO., LTD., specializing in the manufacture and sale of ink and related materials. In 1976 we made a dynamic change in our business direction, shifting our main focus toward the manufacture of solder resist products. Confidence in our technical capabilities supported this decision.

To achieve further growth, the TAIYO Group has revised its corporate philosophy. This change reflects our commitment to applying the technology cultivated through solder resist development and manufacturing as a platform through which each member of the TAIYO Group strives to improve every aspect of its technology and promote the development of innovative products in new fields. This new philosophy reflects our desire to exist as a corporate group that supports dreams by providing global markets with products that contribute to the realization of an enjoyable society.

Through this philosophy, we aim to shift from a structure that is highly dependent on solder resist products and propel the Group toward a comprehensive chemical company. To realize this goal, we are focusing on new business development in the fields of food, energy, medical and pharmaceuticals.

Aiming to grow the medical and pharmaceutical business into a second pillar of Group business, we will concentrate on expanding our operations in these fields. Having obtained approval to manufacture and sell 14 long-term listed products, on October 1, 2019, we acquired the Takatsuki Plant of the Daiichi Sankyo Group. Through this acquisition, we established a domestic manufacturing facility. Moving forward, we will continue to acquire long-term listed products while also working to expand our overseas network as we aim for global business expansion.

We ask for your ongoing support of the TAIYO Group.



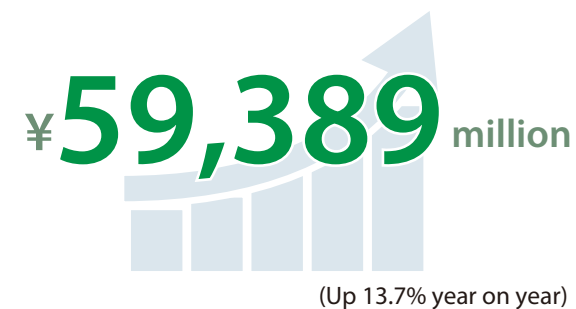
President and CEO  
Eiji Sato



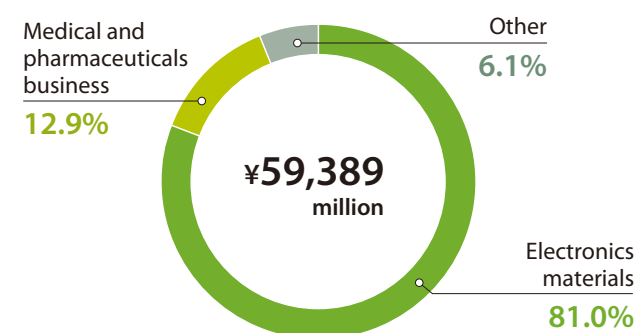
# Overview of FY2019 (Consolidated)

## KPIs for Performance and Financial Condition

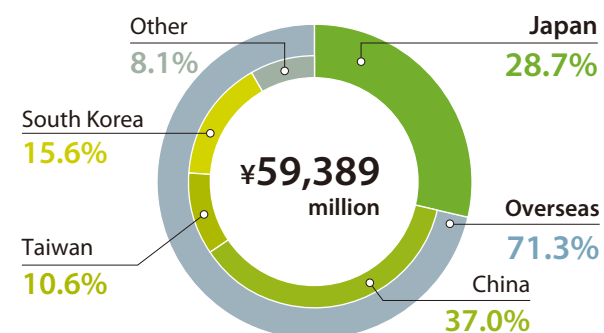
### Net sales



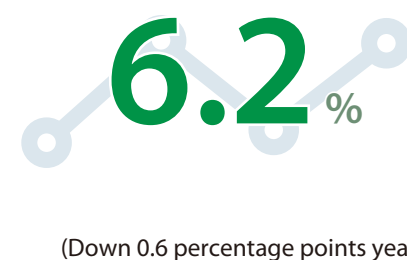
### Reportable segment



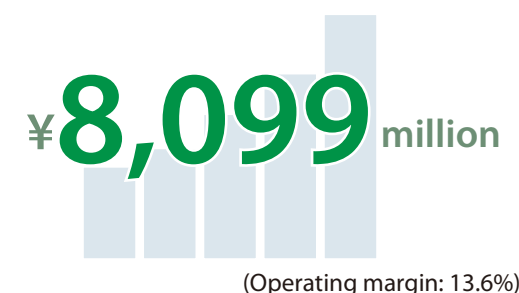
### Geographic segment



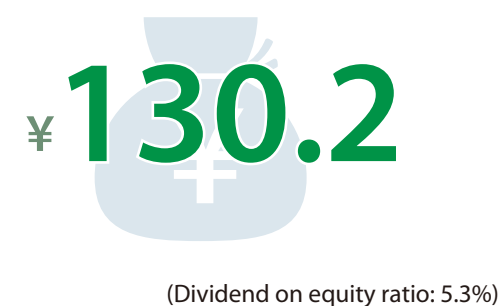
### Return on equity



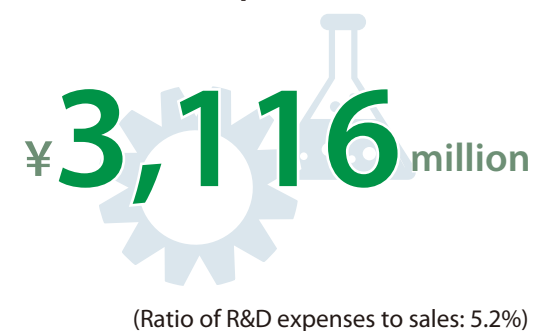
### Operating income



### Dividend per share

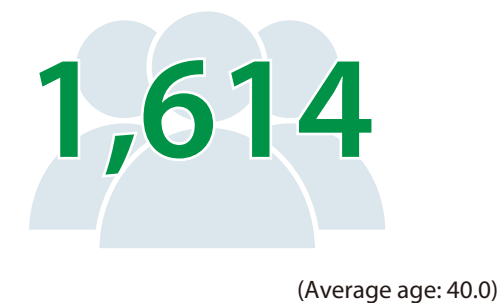


### R&D expenses

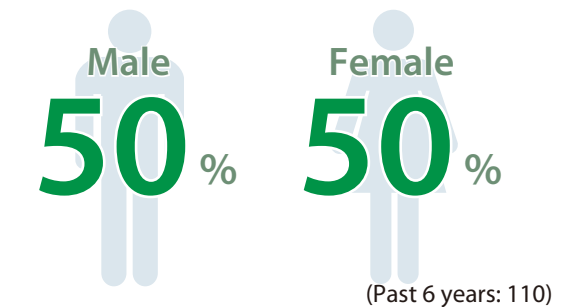


## KPIs on ESG Information

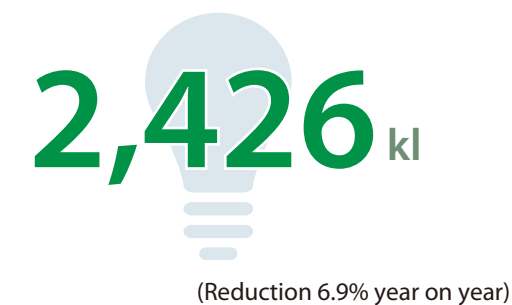
### Number of employees



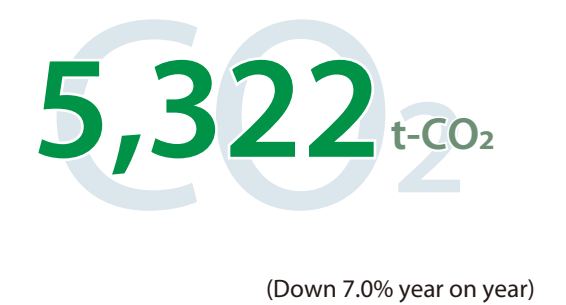
### Gender ratio of newly recruited graduates



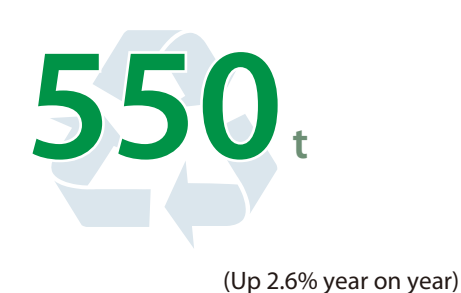
### Energy use (crude oil equivalent)



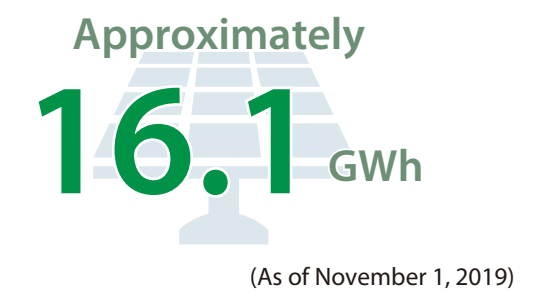
### CO<sub>2</sub> emissions



### Waste emissions



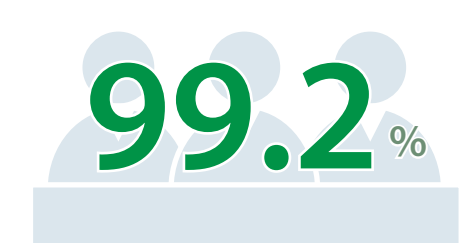
### Annual estimated solar power generation



### Ratio of outside directors



### Board of Directors attendance rate





# History

## Growth Fundamentals Built Up over 60 Years

1953

### TAIYO INK MFG. CO., LTD. established

Taiyo Ink Manufacturing was established in Minato-ku, Tokyo to manufacture and sell printing ink. In Japanese, “taiyo” means “sun.” The name was decided on because it reflects our desire to be useful to people everywhere and bring light into the world.



1976

### Radical change in business policy

In a radical change in business policy, the company decided to switch from its mainstay business of printing ink to solder resist products and other chemical materials for the electronics industry. At the time, our chemical materials business was still at the trial-and-error stage and the marketability of these products was unknown; the future of the company therefore rested on this decision.

1982

Ranzan Plant (current Ranzan Facility) established.

1984

Exhibited liquid developable solder resist at the JPCA Show.

1985

The company developed the current standard liquid alkaline developable solder resist (PSR- 4000) and applied for a basic patent.



Ranzan Plant



JPCA Show

1988

### Commenced locally-based production overseas

In order to respond to rapidly increasing sales in South Korea, TAIYO INK MFG. CO., (KOREA) LTD. was established and local production began. Through local production also in the United States, Taiwan, and China, TAIYO INK has built up a global supply system focused on local production and marketing.

1988

Established TAIYO INK MFG. CO., (KOREA) LTD.

1990

Established sales subsidiary TAIYO AMERICA, INC. in Nevada, United States.

1995

Transformed US sales subsidiary TAIYO AMERICA, INC. into a manufacturing and marketing company.

1996

Established TAIWAN TAIYO INK CO., LTD.

1999

Established sales subsidiaries TAIYO INK INTERNATIONAL (SINGAPORE) PTE LTD and TAIYO INK INTERNATIONAL (HK) LIMITED.



TAIYO AMERICA, INC.



TAIYO INK INTERNATIONAL (SINGAPORE) PTE LTD

2001

### Listed on the First Section of the Tokyo Stock Exchange

Our listing on the First Section of the Tokyo Stock Exchange and the completion of the Ranzan-Kitayama Facility (current headquarters of TAIYO INK MFG. CO., LTD.) enabled higher quality and more stable product supply in both Japan and overseas. Responding to the dramatically changing external environment, we also commence production and marketing in China.



Listed on the Tokyo Stock Exchange

2001

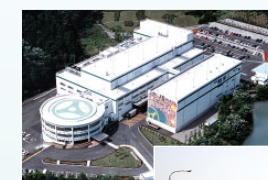
Opened the Ranzan-Kitayama Facility, the company's main domestic production base.

Established technical support subsidiary TAIYO INK (THAILAND) CO., LTD. in Thailand and local production subsidiary TAIYO INK (SUZHOU) CO., LTD. in China.

2010

Implemented a company split and changed the corporate name to TAIYO HOLDINGS CO., LTD.

Established sales subsidiary TAIYO INK TRADING (SHENZHEN) CO., LTD. in China.



Ranzan-Kitayama Facility



TAIYO INK (SUZHOU) CO., LTD.

2013—2019

### Commemorating our 60th anniversary, and taking on new challenges

As part of our strategy for ongoing Group growth, we are working to expand our share of the solder resist market while creating a framework for the continuous development and rapid commercialization of new products that will grow into profit drivers to rival solder resist.

2013

Obtained shares in the Taiwanese company ONSTATIC TECHNOLOGY CO., LTD. and made it a subsidiary.

2014

Established photovoltaic power generation business subsidiary TAIYO GREEN ENERGY CO., LTD. in Japan.

2015

Established TAIYO INK PRODUCTS CO., LTD. in South Korea as a sales subsidiary of TAIYO INK MFG. CO., LTD.

Obtained the Japanese company Chugai Kasei Co., Ltd. through a share swap and made it a subsidiary.

2017

Established TAIYO Pharma Co., Ltd. as a subsidiary in the pharmaceutical business.

2018

Obtained all shares of two systems engineering companies, Micro Network Technologies Corp. (MNT) and Thou-Management Corp (TMC), and made them subsidiaries.

Established TAIYO TRADING (THAILAND) CO., LTD.



TAIYO GREEN ENERGY CO., LTD.



TAIYO Pharma Co., Ltd.

2019

Completion of transfer of marketing and manufacturing rights of 14 long-term listed products from Chugai and Nippon Boehringer to TAIYO Pharma.

Acquired new shares, taking over ownership of the Takatsuki Plant of Daiichi Sankyo Propharma Co., Ltd. (subsidiary acquisition)



Takatsuki Plant

Net sales

1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986

1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

# Interview with the President and CEO

*“We will implement our Management Philosophy by creating new businesses and ensuring the Group’s growth.”*



(Interview date: July 31, 2019)

## Q How do you perceive the business environment surrounding the TAIYO HOLDINGS Group?

The current environment in the electronics field, our main business, is extremely challenging. This can be attributed to growing uncertainties in the global economy, including the worldwide decline in demand for automobiles and smartphones, trade friction between the US and China and tighter controls on exports from Japan to South Korea. However, taking a somewhat longer view of electronics overall, the outlook is not entirely bad, especially as we are rapidly approaching the full-scale rollout of 5G, IoT and other next-generation mobile communications systems. It is extremely critical that the Group seize this timing to develop products corresponding to new business domains and propose them to customers.

At the same time, the Group entered the pharmaceutical business with the establishment of wholly-owned subsidiary TAIYO Pharma Co., Ltd., in August 2017. However, prices of long-listed pharmaceutical products and sold by TAIYO Pharma are on a downward trend. Although this decline in drug prices will have a negative impact on the profit environment, we are cognizant of our ability to sufficiently respond by enhancing efficiency.

## Q Can you reflect on performance in the fiscal year ended March 31, 2019, and provide an update on the status of the Medium-term Business Plan NEXT STAGE 2020?

Under our three-year Medium-term Business Plan NEXT STAGE 2020, which began in the fiscal year ended March 31, 2018, we have launched policies aimed at extricating the Group from a structure that is substantially dependent on solder resist single products and businesses in the electronics materials business to make the leap toward becoming a comprehensive chemical company. Specifically, we will quickly launch the medical

and pharmaceutical business as a second pillar of revenue unaffected by environmental changes. In the fiscal year ending March 31, 2020, the final year of this plan, we will have acquired a pharmaceutical factory in Japan and have established a full-scale system in the medical and pharmaceutical business.

Note: The acquisition of TAIYO Pharma Tech (Takatsuki Plant) was completed on October 1, 2019.

### Medium-term Business Plan

Management Indicators: Targets and Results

	Targets	FY2018 Results	FY2019 Results
Operating margin	20% or more	21.7%	13.6%
ROE	11% or more	6.8%	6.2%
DOE	5% or more	6.5%	5.3%
Operating income	Achieve a new record high	¥11,337 million	¥8,099 million

### Basic Policies

1. Improve profitability of solder resist (SR)
2. Expand into areas related to printed wiring board (PWB) other than solder resist
3. Launch a medical and pharmaceutical business
4. Move the energy and food businesses into the black
5. Strengthen basic research capabilities
6. Business alliance with DIC Corporation\*
7. Execute M&A strategy
8. Expand CSR activities
9. Develop and utilize self-sufficient personnel capable of acting independently

\* TAIYO HOLDINGS CO., LTD. concluded a business alliance with DIC Corporation on January 25, 2017.

Looking back over the past year, the business strategies implemented have produced various results.

Specifically, in the electronics materials business, we have been moving forward with developments aimed at creating a new market in the cutting-edge materials field. As the environment surrounding this business has not necessarily been favorable, business performance has unfortunately declined. However, in terms of sowing seed for the next-generation, I am proud of our efforts.

In the medical and pharmaceutical business, we decided to acquire Daiichi Sankyo Propharma's Takatsuki Plant.

Although our initial entry into the pharmaceutical business began with the acquisition of long-listed pharmaceutical products licenses, all production up to now had been outsourced. With the acquisition of our own factory in October 2019, we will be able to produce a number of products in house, representing a major step forward as a pharmaceutical manufacturing and sales company going forward.

These efforts are expected to lead to performance results from this fiscal year forward, and I feel that this past year has been one of solid achievements in terms of establishing these two pillars.



## Interview with the President and CEO

### Q What scenario is envisioned for your leap forward and growth as a comprehensive chemical company?

The comprehensive chemical company envisioned by the Group is one that expands from an electronics-focused business area based on electronics and chemicals, to the areas of pharmaceuticals, food and energy. Unlike the standard image of comprehensive chemical companies with large plants that produce materials, what we call comprehensive chemicals involves the use of applied technologies with a wide range of business fields. Currently, our Group is the top niche company in the solder resist business positioned upstream in the semiconductor industry, but looking ahead to future business growth, I feel strongly that we need to make a leap forward to become a comprehensive chemical company. To this end, it is essential to adopt a long-term perspective with regard to business development strategy. Based on this thinking, up to now we have expanded our business domain through execution of M&A investments.

In terms of business responses to the market environment and future growth scenarios and in the electronics materials and medical and pharmaceutical businesses, I can say the following:

In the electronics field, the best way to increase profitability is to steadily launch new products in cutting-edge areas. This will incur development costs, but in terms of profitability, it is the best approach. On the other hand, there is an opposite move in the electronics field, for example, launching a war of attrition with low-priced products while following a strategy aimed at preventing competitors

from growing. In terms of overall profitability, this may cause a temporary setback, but including all this, we aim for operating margin of 20% for the electronics materials business as a whole.

We entered the medical and pharmaceutical business through M&A, and although the amortization of goodwill is unavoidably substantial, the business is generating a solid profit margin of around 15%, and as amortization of goodwill proceeds, profitability will rise to the same level as in the electronics materials business. Because of the impact of goodwill, for the time being, we have to manage on the basis of EBITDA (operating income/loss + depreciation and amortization), but after 2–3 years, we think electronics materials and medical and pharmaceutical business EBITDA will be nearly the same.

In particular, we plan on substantially growing the medical and pharmaceutical business in three areas. The first involves new investments in regenerative medicine. We are already partnering with several companies to develop new drugs in the field of regenerative medicine. However, the amount invested is comparatively small, as we are not the only company investing due to the high development costs associated with new drugs. The second area involves long-listed pharmaceutical products-related business. At present, we are engaged in licensing and sales in Japan, but our medium- to long-term strategy involves plans to expand licensing and sales to overseas markets. The third area involves the overseas deployment of production plant know-

how in line with our acquisition of a top-class plant in Japan.

From a social perspective, I think the overseas expansion of the medical and pharmaceutical business is extremely meaningful. First of all, I think that if we can deliver existing drugs globally, we will help more people than by developing new drugs. As the Group is expanding its electronics materials business globally, we can utilize that know-how for the global deployment of pharmaceuticals to patients in areas where they are currently not being delivered.

The TAIYO Pharma slogan is “a company that is serious about drugs that are needed,” referring to the kinds of drugs that are needed and the places they are needed in. Our medium- to long-term growth strategy is to seriously work on the global deployment of existing drugs.

In this way, the Group’s medium- to long-term growth strategy is to firmly develop the next generation in the electronics materials business and to expand the medical and pharmaceutical business globally.

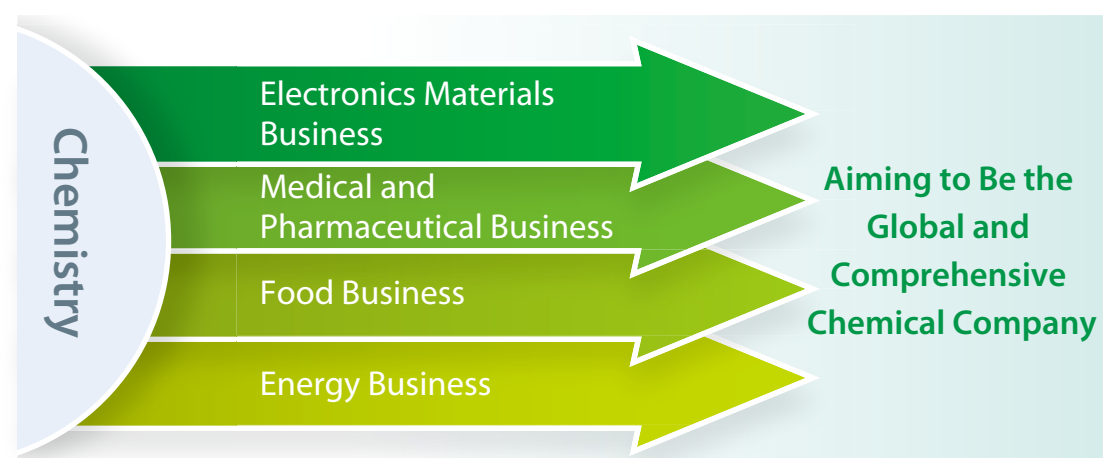
The electronics materials business and the medical and pharmaceutical business have many points in common that are directly related to productivity, such as production

process and planning efforts. Although the materials themselves are different, there is considerable commonality in process management, and differences are not as great as in different industries, thus various know-how can be propagated—especially for use in quality control.

We have the skills and equipment that can be commissioned for analysis and the policy of business itself to construct both strategies for increasing the number of long-listed pharmaceutical products as well as strategies for successful performance in commissioned analysis business. The company commissioning does incur any additional costs, so the more contracts are entered into, the higher the utilization rate and higher the profitability.

Because of declining drug prices, the medical and pharmaceutical business is challenging from an environmental perspective, but price decreases are something happens in every industry. In the electronics industry, customers demand lower prices almost every year. Thus, we do not think that only pharmaceutical products are special, and even if prices go down, we can respond by increasing efficiency and profitability.

### Similarities between Manufacturing Processes for Pharmaceutical and Electronic Materials





## Interview with the President and CEO

### Q What systems are in place to support sustainable growth?

We are proactively engaged in the promotion of ESG initiatives to create structures supporting sustainable growth. First of these is governance. In light of societal demands, it has become commonplace in domestic companies today, but one third of the members on our Board of Directors are outside directors, and in fact, the ratio of outside directors has been relatively high since early on. Furthermore, outside members comprise 75% of our Board of Corporate Auditors, to ensure independence. We created an advanced corporate governance system with the voluntary establishment of the Nomination Advisory and Compensation Advisory committees, which are chaired by outside directors and have a majority of outside directors as members.

In these committees, we encourage participation in discussions by as many outside directors as possible. For example, in entering the pharmaceutical business, we conduct seven–eight discussions every six months in which outside directors take an active role and are confident that this ensures the effectiveness of our Board of Directors. As for major deals that may substantially affect the Company's

future, we spend a great deal of time ensuring that outside directors understand the details so that they make a well-considered decision.

In this way, the Group aims to improve objectivity and create a balanced corporate governance system that is easily understood outside the Company. This is a very important factor in terms of risk management and accountability.

Furthermore, in terms of human resource development, I think there is a considerable degree of freedom with regard to investing in people and individual discretion. Each and every employee is a source of differentiation from competitors, thus it is important to provide employees with the motivation to draw on their cognitive powers and think through their actions thoroughly. For example, in research and development, we develop products that contribute to an advanced information society and comfortable environment under a structure enabling research into themes chosen by management as well as independently focused. Under the watchwords "building a self-motivated workforce," Group employees are self-sufficient and spend each day driven by internal motivations.

### Q What are your financial policies and message to shareholders and investors?

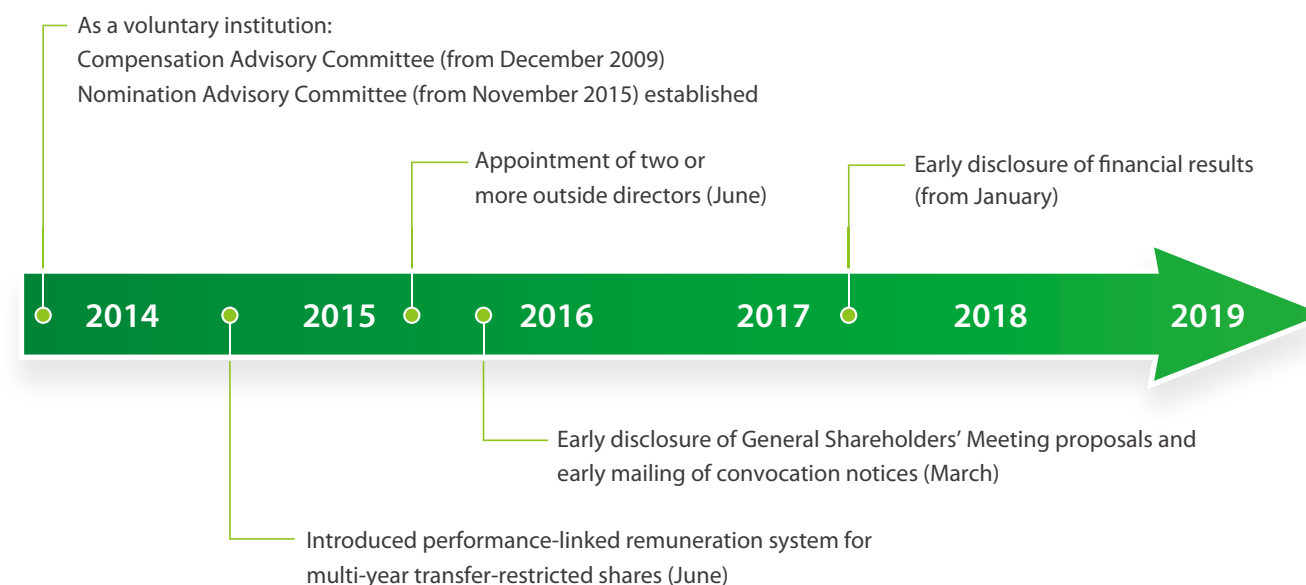
The Group's financial policy is to secure appropriate funds for business activities, maintain appropriate liquidity, and maintain a sound balance sheet. Necessary funding is obtained through operating activities and borrowing from banks. We believe the Group has secured the level of funds currently required.

We consider the return of profits to shareholders through cash to be an important policy and we continue to return high levels of profits on a continuous and stable basis. Using the dividend on equity ratio as our target index, we aim to maintain this figure at a minimum 5% of consolidated financial results over the mid-to long-term.

Finally, the Group is proactively engaged in ESG to realize a sustainable society, and above all, we believe that building a self-motivated workforce and creating new business will enable us to contribute to the sustainability of society. We are expanding beyond our current business

domains with the aim of benefitting society with products and businesses developed and grown by Group human resources. We hope shareholders and investors see this and resonate with it. We will continue to move steadily forward with high profitability and growth strategies to maintain trust, meet expectations and remain highly valued by all our stakeholders.

## Transition of Corporate Governance System

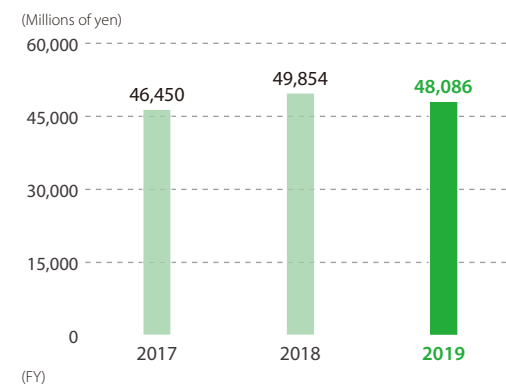




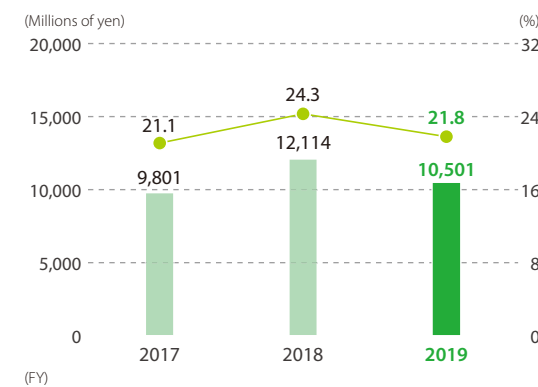
# Electronics Materials Business

The electronics materials business mainly manufactures and sells chemical products, primarily for the electronics industry. Printed wiring board (PWB) materials are a major product of the business and are chemical materials that are used in PWBs such as solder resists. Through this business, the Company is utilizing the elemental technologies it cultivated while handling PWB materials to open up new product fields in the electronic components industry.

Segment Sales

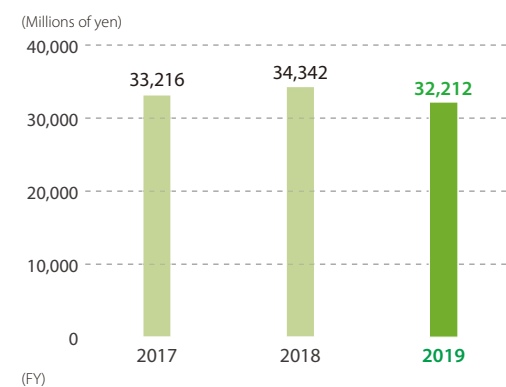


Segment Income and Income Rate

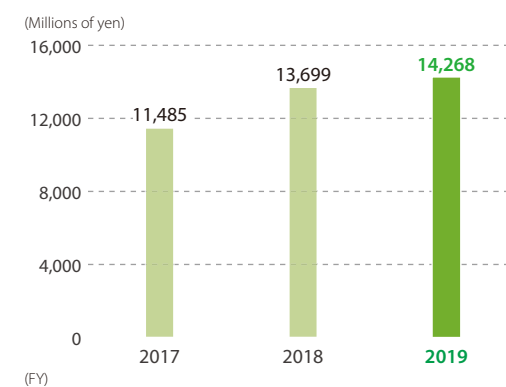


Sales by Product Category

Rigid PWB Materials



PWB Materials Other than Rigid PWB

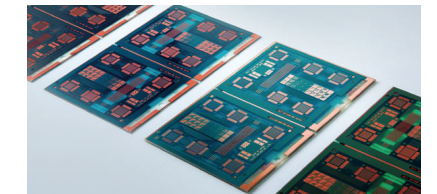


Note: Sales of other related products were ¥1,749 million for FY2017, ¥1,813 million for FY2018, and ¥1,606 million for FY2019.

## Classification of Products

### Rigid PWB Materials

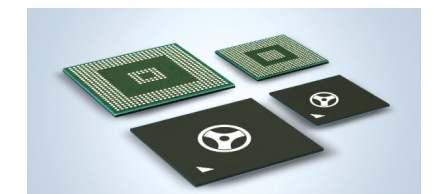
A liquid solder resist that is applied to the surface of a rigid board. A mainboard is a printed wiring board (PWB) made with a rigid insulated substrate. This single board, which is primarily installed inside electronic devices, is mounted with LSIs, resistors, condensers and other components.



### PWB Materials other than Rigid PWB (PKG, FPC, and buildup board materials)

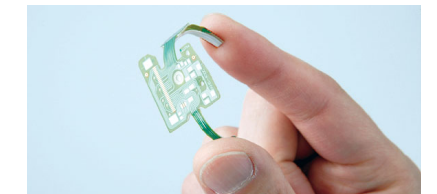
#### Semiconductor Packaging (PKG) Materials

Solder resist applied to the surface of a PKG board. Two types are available: liquid and dry film. A PKG board is a type of printed wiring board used as an interposer when mounting semiconductors used in devices such as computer CPUs, smartphone AP or memory.



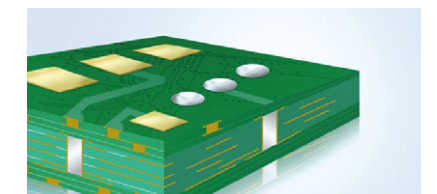
#### Flexible Printed Circuit (FPC) Materials

Main products include solder resists that are applied to the surface of flexible boards and a photoimageable coverlay. One of our new products, this photoimageable polyimide film offers both high resolution and high bendability. Flexible printed circuit boards are soft, flexible boards made from polyester or polyimide film coated with copper foil.



#### Build-up Materials

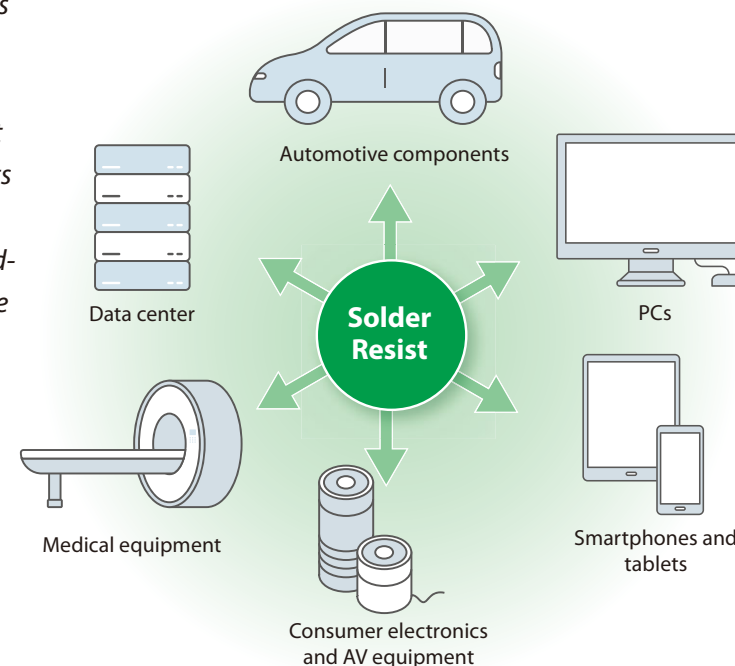
Main products include hole-plugging ink and interlayer insulation materials. Build-up refers to a method of manufacturing heavily layered PWBs by alternately laminating insulated and conductive layers on a core board (or base board). The ink used to fill conductive holes in a core board is called hole-plugging ink. The laminated insulation is called interlayer insulation.





# Solder Resist

Printed wiring boards (PWBs) are used in various digital consumer electronics such as mobile phones as well as electronic products such as automobile electronics equipment. Solder resist (SR), a core product of the TAIYO Group, protects PWBs by coating the surface of the conductor circuits, preventing short circuits and other product problems, and making long-term, stable use possible.



## Product Segments

Group	Category		Remarks	Type	Main End-Products
PWB insulating materials	Rigid	High-end	SR materials for insulation and surface protection use	Liquid	Smartphones, vehicles, tablets
		Regular			PCs, LDC television, OA equipment, industrial equipment
	PKG*1			Liquid/Dry Film	Semiconductors
	FPC*2			Liquid/Dry Film	Smartphones, cameras, precision equipmet, etc.
	Build-up		Build-up materials for interlayer insulation and hole plugging use	Liquid/Dry Film	PCs, consumer electronics, etc. (multi-layer PWB)

\*1 Semiconductor packages

\*2 Flexible printed Circuits

## Roles of Solder Resist

### 1. Preventing solder attachment in areas where it is not needed

We will generate profit and increase corporate value, thereby contributing to the well-being and prosperity of customers, communities, shareholders, and employees.

### 2. Protecting circuit patterns from dust, heat, and moisture

SR protects circuit patterns from the external environment including dust, heat, and moisture. This makes it possible for electronic devices to operate stably over extended periods.

### 3. Maintaining electrical insulation between circuit patterns

In conjunction with the miniaturization of electronic devices, package substrates are also becoming increasingly fine with circuit patterns on general circuit boards in the 50 μm to 150 μm range. SR maintains insulation between circuit patterns, preventing short circuits.

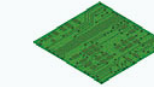
## Photoimageable Solder Resist Pattern Formation Process (Photolithography)

### 1. Printing (coating)



SR is applied to the entire surface.

### 2. Pre-curing



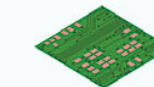
The wiring board is heated to 80°C for 20 to 30 minutes and provisionally dried.

### 3. Light exposure



The wiring board is exposed to ultraviolet light passed through a negative film. The SR in areas exposed to the light hardens.

### 4. Developing



The unhardened SR is washed off using a developing agent (a dilute alkali water solution).

### 5. Post-curing

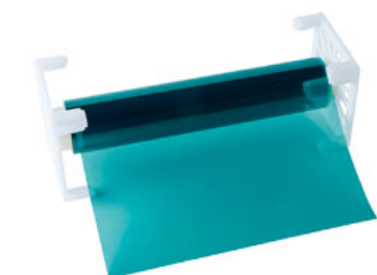
The circuit board is heated to 150°C for 50 to 60 minutes to harden the SR. The SR pattern formation process is complete.

## Liquid-Type SR

There are various types of SR, but TAIYO INK was a pioneer in the development of alkaline developable liquid-type SR, which has now become a leading product. It is characterized by high sensitivity as well as outstanding gold plating resistance and water-soluble flux resistance. It is also used as SR on automotive PWBs for its excellent migration resistance and pressure cooker test resistance.

## Dry Film-Type SR

Existing liquid-type SR can be preprocessed into a film and a uniform thickness can be achieved. The use of dry film-type SR on semiconductor PKG substrates is increasing. Because the drying process, which is essential for liquid-type SR, can be eliminated, it is expected that dry film-type SR will reduce manufacturing costs.

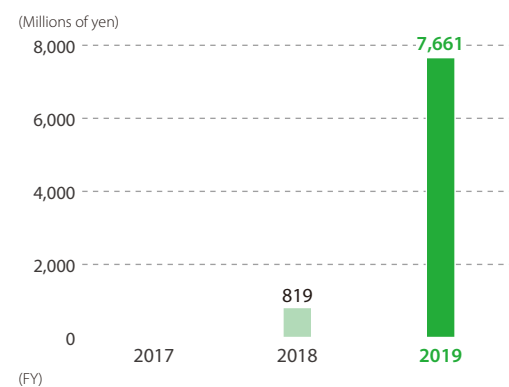




# Medical and Pharmaceuticals Business

The Company is aiming to make the leap toward becoming a comprehensive chemical company by entering the pharmaceutical business through TAIYO Pharma Co., Ltd., which manufactures and sells medical and pharmaceutical products, and TAIYO Pharma Tech Co., Ltd., which manufactures pharmaceuticals on consignment. Moving forward, we will strive to expand our long-term listed products business by acquiring more products while conducting global business development targeting growth in our overseas network, starting with the Takatsuki Plant as a base for domestic manufacturing.

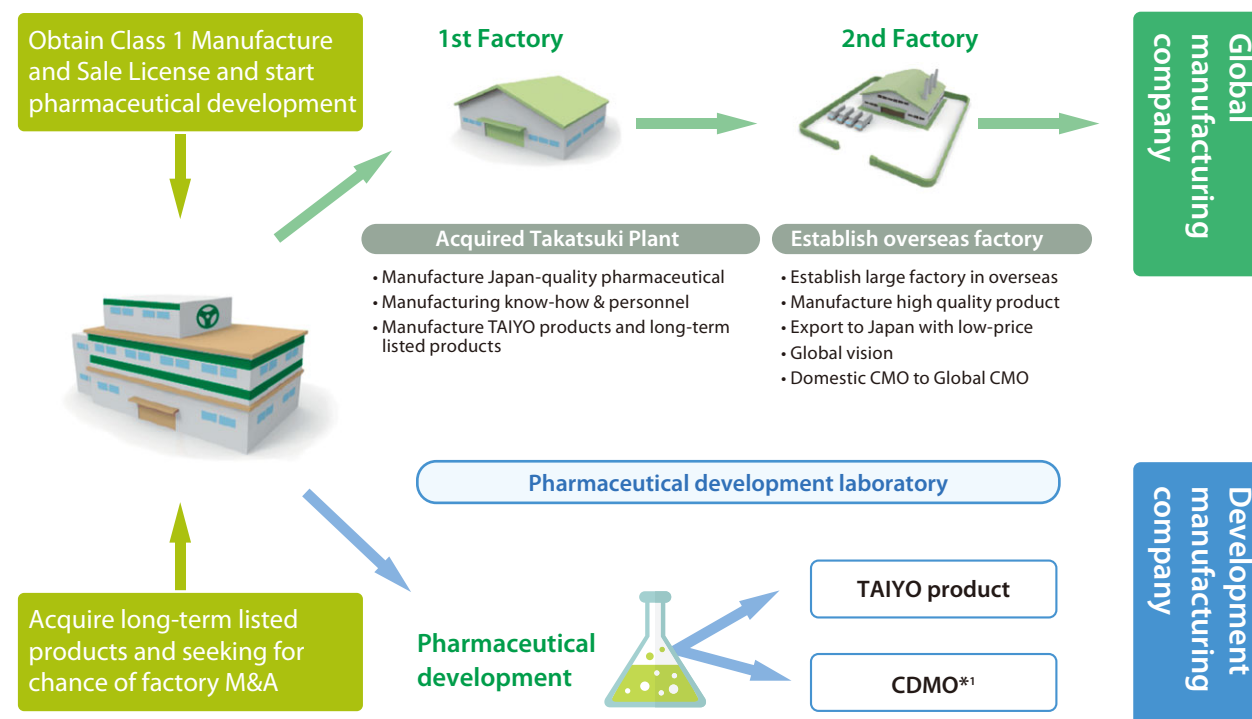
## Segment Sales



## History

August 2017	TAIYO Pharma Co., Ltd. established
January 2018	Completed asset transfer of 13 long-term listed products
March 2019	Concluded an asset transfer agreement concerning one long-term listed product
April 2019	TAIYO Pharma Tech Co., Ltd. established
October 2019	Acquired Takatsuki Plant (TAIYO Pharma Tech Co., Ltd.) of Daiichi Sankyo Propharma Co., Ltd.

## Prospect of Medical and Pharmaceutical Business



\*1 CDMO=Contract Development Manufacturing Organization

## Acquired new shares and fully took over ownership of the Takatsuki Plant of Daiichi Sankyo Propharma Co., Ltd. (subsidiary acquisition)

The TAIYO Group's high degree of reliance on its printed wiring board materials business caused a pressing need for new business development. In response to this need, we entered the pharmaceutical business as both an R&D-based chemical manufacturer and a global manufacturing company with the goal of improving synergy with our core businesses, elevating domestic demand and global growth potential and raising employee motivation through extensive social contribution.

Since inheriting our first long-listed pharmaceutical products from Chugai Pharmaceutical in 2018, we have expanded our lineup and now supply and sell 14 long-listed pharmaceutical products.

The long-listed pharmaceutical products we inherited have an extensive and proven track record and are of high importance to society. TAIYO Pharma Co., Ltd., a subsidiary that is part of our medical and pharmaceuticals business, will aim for stable and ongoing business activities by establishing points of contact with medical institutions and patients by ensuring a steady supply of long-listed pharmaceutical products while supporting product development and manufacturing through innovative marketing and technology.

## TAIYO Pharma Tech (Takatsuki Plant)

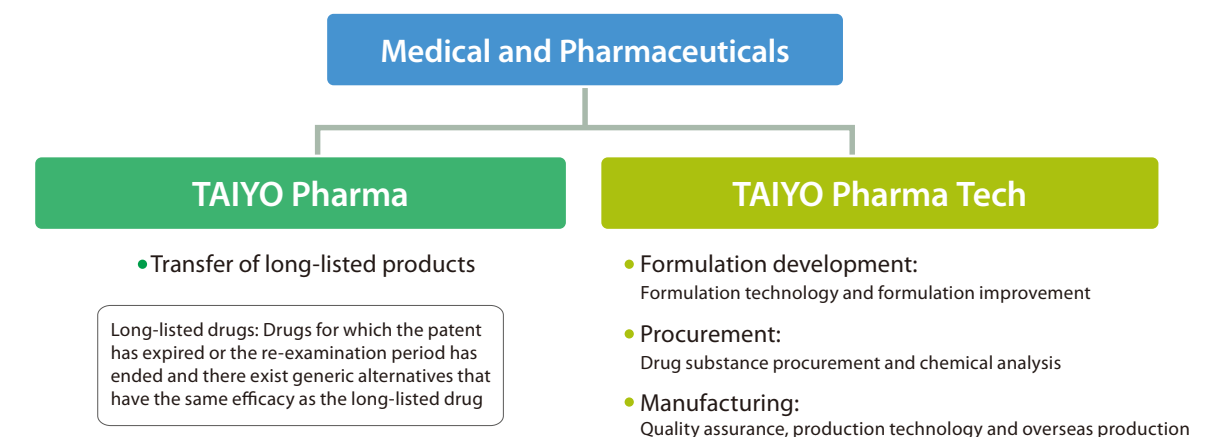
Furthermore, we took over the Takatsuki Plant of Daiichi Sankyo Propharma on October 1, 2019, with the goal of securing a new in-house manufacturing base in the medical and pharmaceuticals business.

The Takatsuki Plant of Daiichi Sankyo Propharma, a pharmaceutical manufacturer in the Daiichi Sankyo Group, began operations in 1933. It has maintained advanced manufacturing that meets GMP standards and a quality control system in manufacturing solid preparations and injectables since that time.

With the acquisition of this plant, the TAIYO Group will begin the manufacture of pharmaceuticals on consignment in addition to the business of TAIYO Pharma and further solidify the foundation of our medical and pharmaceutical business. We will continue to take orders for manufacturing from the Daiichi Sankyo Group and expand this business. In the future, we plan to make effective use of the technological capabilities and production capacity of the Takatsuki Plant to secure orders from companies outside of the Daiichi Sankyo Group and meet the diverse needs of pharmaceutical companies in Japan and overseas.

## Areas in Which We Should Demonstrate Our Strengths

We will focus our efforts on formulation development, procurement and manufacturing instead of R&D (drug discovery) and sales.





## Medical and Pharmaceuticals Business

### TAIYO Pharma Tech Outline

Company name	TAIYO Pharma Tech Co., Ltd.
Address	4-38, Aketa-cho, Takatsuki-shi, Osaka, Japan
Representative's title and name	Eiji Sato, President and CEO
Business contents	Manufacture and sale of pharmaceutical products
Share capital	¥300 million
Establishment date	April 25, 2019
Number of shares issued	6,000 shares
Fiscal year-end	March 31
Major shareholder and shareholding ratio	TAIYO HOLDINGS CO., LTD. :100%

### TAIYO Pharma Tech (Takatsuki Plant) Outline

Area	Plant floor space: 52,584m <sup>2</sup>
Operational launch	December 25, 1933
Number of employees	Approximately 330 (as of April 1, 2019)
Dosage forms of manufactured medicine	Solid preparations and injectables

### Vision of the Medical and Pharmaceuticals Business

Moving forward, we will aim to expand the long-listed pharmaceutical products business through efforts such as further product acquisition while working to create products that fulfill needs across the globe. Furthermore, armed with its pharmaceutical manufacturing bases, the TAIYO Group is considering expanding its business, primarily in terms of manufacturing, by applying the technologies and manufacturing expertise it has cultivated up until now and leveraging its overseas network.

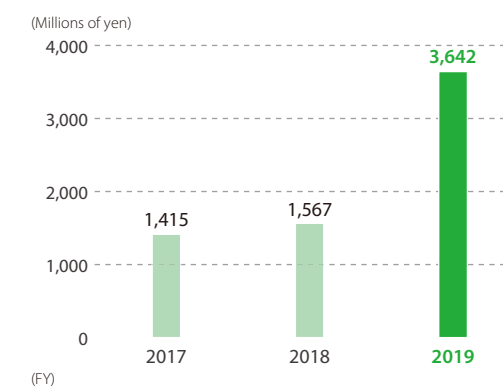


TAIYO Pharma Tech (Takatsuki Plant)

## Other

*In other segments, we will continue to grow and brighten people's lives as a comprehensive chemical company through our natural energy-based power generation business; our food business, which primarily focuses on plant factory management and practical research concerning insect-based animal feed; the manufacture and sale of chemicals such as dyes and pigments; and software development.*

### Segment Sales



### Other Businesses: Energy, Food, Systems and Fine Chemicals

#### Highlight in 2019

##### ● TAIYO GREEN ENERGY

TAIYO GREEN ENERGY established new floating solar power plants (10 plants in total).

The 10 plants are estimated to generate 16.1GWh on an annual basis, which is equivalent to 100% of the Group's power consumption in Japan (excluding TAIYO Pharma Tech).

##### ● Micro Network Technologies

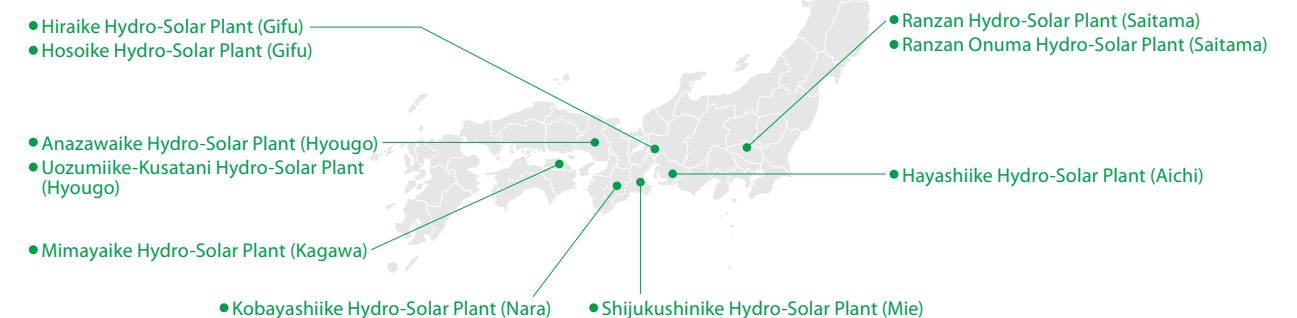
(1) On November 1, 2019, Thou-Management Corporation was dissolved and merged into Micro Network Technologies Corp. (system subsidiary)

(2) Thou-Management Corporation (system subsidiary): Adoption of verification test by utilizing Quasi Zenith Satellite System (QZSS) (MICHIBIKI)

##### ● TAIYO Fine Chemicals

July 1, 2019: Chugai Kasei Co., Ltd. joined TAIYO HOLDINGS Group in June 2015 and subsequently changed its company name to TAIYO Fine Chemicals Co., Ltd.

### TAIYO Group's Floating Solar Power Plants in Japan



A plant factory operated by TAIYO GREEN ENERGY



Functional colorants (TAIYO Fine Chemicals)



# Supply Chains

## Network Covering the Global Market

In fiscal 2019, PWB materials accounted for about 81% of the TAIYO Group's sales. The principal centers for production of PWBs have shifted from the United States and Europe to Japan and then to emerging countries, and, in recent years, production in China has risen rapidly.

While responding to these global changes in the business environment, the Group has conducted transactions with PWB manufacturers around the world. The Group has been aware that its most important mission is to provide superior products and services at all times and has worked to expand this network to cover global markets. Today, the Group has manufacturing and marketing bases in Japan, China, Taiwan, South Korea, and the United States, as well as marketing and technical service centers in Shenzhen and Hong Kong in China, Singapore, and Thailand.

The quality of the Group's products and services, coupled with the agility of its global network, has enabled the Group to secure the leading share in SR in global markets, and overseas sales have climbed to account for about 80% of its net sales. Further medium- to long-term growth in demand is expected for PWB materials for use in electronics components around the world.

The Group will step up its activities to develop its businesses globally and will endeavor to respond to burgeoning demand.

## Quality Management in the Overall Supply Chain

Quality improvement activities throughout the Group's supply chain are indispensable to consistently providing superior products and services to customers throughout the world.

Senior marketing personnel endeavor to match product specifications with client requirements through close communication to enable customers to select the optimal products for their needs from the diverse lineup of items the Group offers.

## Offering Advantages to Customers through "Local Production and Local Procurement"

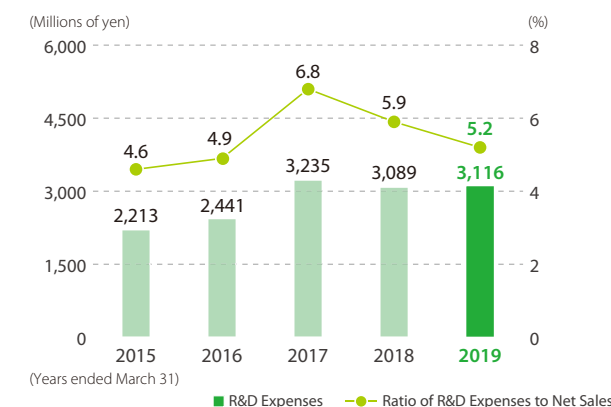
The Group does business with customers in virtually every country. In many cases, product sales prices are quoted in foreign currencies, and fluctuations in exchange rates have an impact on the Group's performance, which is a management issue. To deal with this, the Group is promoting the implementation of "local production and local procurement" or, in other words, "ensuring that products that are sold in local areas (markets) are manufactured in those same areas, using locally procured materials." The Group is responding to an increasing percentage of raw materials that are procured locally by having income and expenditures denominated in the same currency.

# Research & Development

Guided by our core values, we conduct our electronics materials business with the aim of contributing toward an advanced information society and a more pleasant environment. To this end, we facilitate research and development activities on insulating materials and conductive materials.

In the current consolidated fiscal year, we spent a total of ¥3,116 million on research and development—¥26 million more than in the previous year.

## R&D Expenses and Ratio of R&D Expenses to Net Sales



## Solder resists

Solder resists, a mainstay of the Group, are used extensively in rigid boards (PWBs with a rigid insulated substrate) and package substrates (PWBs used as an interposer when

mounting dies). The performance requirements for these products grow tougher each year. Accordingly, in developing our solder resists, we emphasize communicating with clients effectively and streamlining the development process so as to accommodate market demand in a timely manner.

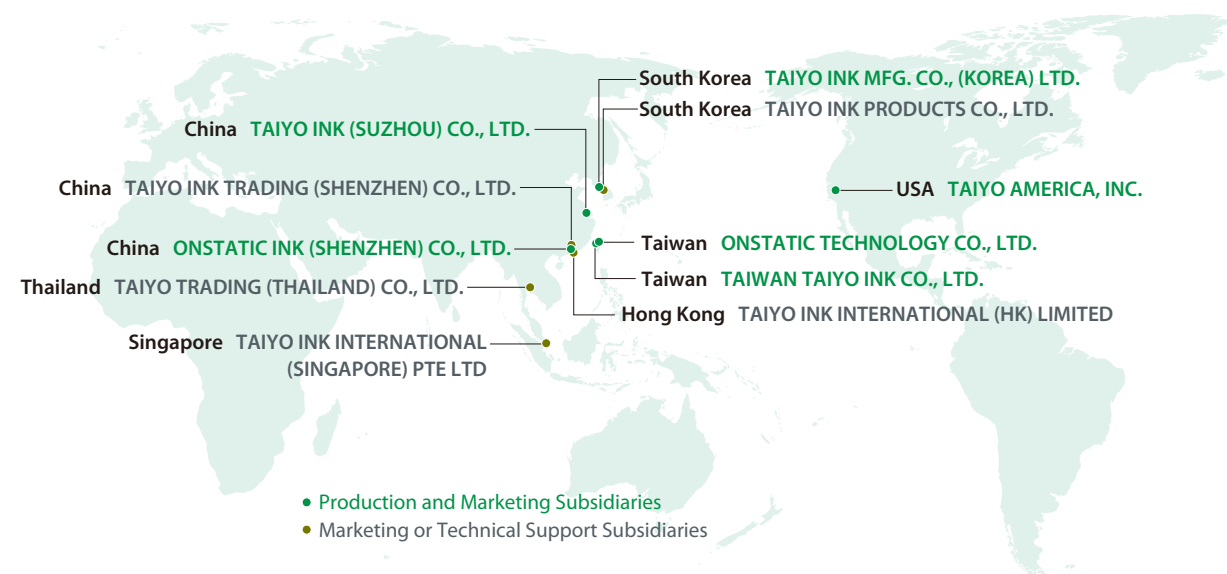
## Other focus areas

Going forward, we expect circuit technology for the 5G, electric vehicles and IoT applications to expand globally. Leveraging our core technology, we aim to generate new value and to forge new markets by developing products with added function.

- Amid the increasing demand for substrates for 5G communications, we are developing the new DF type of interlayer insulating materials.
- Our photoimageable coverlay enables fine processing and mechanical properties such as heat resistance and flexibility, responding to the need for more smartphones and tablets that are thinner and more lightweight.
- In the healthcare sector, we provide materials for wearable devices.
- Inkjet materials effectively minimize the carbon footprint.
- Our display materials help ensure high image quality, high resolution and energy efficiency.

Note: For details, please refer to Annual Securities Report: [https://www.taiyo-hd.co.jp/\\_cms/wp-content/uploads/2019/08/20190820\\_01\\_en.pdf](https://www.taiyo-hd.co.jp/_cms/wp-content/uploads/2019/08/20190820_01_en.pdf) (Research & Development Page 22-24)

## Global Network



Ranzan Labo



# Corporate Governance

## Management Team (As of June 22, 2019)

### Directors



**Eiji Sato**

President and CEO

**Reason chosen as for director**

Eiji Sato oversees the management of the Company's Group and has driven the overall Group forward with his strong leadership. TAIYO HOLDINGS expects that he will continue to play an important role in the Company Group's decision-making and supervision of business execution. Accordingly, TAIYO HOLDINGS has selected him as a director.



**Takayuki Morita**

Director

Senior Executive Officer

**Reason chosen as for director**

Takayuki Morita has fulfilled a major responsibility as a person responsible for the Company's Group in charge of major markets, including TAIYO INK TRADING (SHENZHEN) CO., LTD. TAIYO HOLDINGS expects that he will continue to use his experience and expertise in corporate decision-making. Accordingly, TAIYO HOLDINGS has selected him as a director.



**Eiji Takehara**

Director

Senior Executive Officer

**Reason chosen as for director**

Eiji Takehara has worked on the expansion and reinforcement of the Company's businesses in Japan. TAIYO HOLDINGS expects that he will continue to use his experience and wide reaching expertise in corporate decision-making. Accordingly, TAIYO HOLDINGS has selected him as a director.



**Hitoshi Saito**

Director

Senior Executive Officer

**Reason chosen as for director**

Hitoshi Saito possesses a wealth of marketing knowledge and management experience outside of Japan and has led a number of companies as a person responsible for the Company Group's subsidiaries. TAIYO HOLDINGS expects that he will continue to use his experience and expertise in corporate decision-making. Accordingly, TAIYO HOLDINGS has selected him as a director.



**Takao Miwa**

Director

Senior Executive Officer

**Reason chosen as for director**

Takao Miwa possesses a wealth of expertise and experience in the electronic materials field and since joining the Company, he has overseen the opening up of new business fields in the Research Division. TAIYO HOLDINGS expects that he will continue to use his experience and expertise in corporate decision-making. Accordingly, TAIYO HOLDINGS has selected him as a director.



**Toshifumi Tamaki**

Director

**Reason chosen as for director**

Toshifumi Tamaki possesses a wealth of experience and expertise in management administration, business execution and research and development as a director of listed companies. TAIYO HOLDINGS expects that he will use his experience and expertise in corporate decision-making. Accordingly, TAIYO HOLDINGS has selected him as a director.

### Outside Directors



**Masayuki Hizume**

Director (Outside)

**Concurrent position:**

The Head of Masayuki Hizume Certified Public Accounting Office

**Main area of expertise:**

Accounting

**Reason chosen for outside director**

Masayuki Hizume possesses specialist knowledge as a certified public accountant as well as a wealth of experience and expertise. TAIYO HOLDINGS expects that he will continue to use his experience and expertise in corporate management. Accordingly, TAIYO HOLDINGS has selected him as an outside director.



**Keiko Tsuchiya**

Director (Outside)

**Concurrent position:**

General Manager, People Value, Japan, Adecco Ltd.

**Main area of expertise:**

Human Resources

**Reason chosen for outside director**

Keiko Tsuchiya possesses a wealth of experience and expertise in the field of human resources, including management experience as a director of temporary employment agencies and staffing agencies. TAIYO HOLDINGS expects that she will continue to use her expertise in our Human Resources Department and to strengthen the Company's human resources. Accordingly, TAIYO HOLDINGS has selected her as an outside director.



**Jinichiro Yamada**

Director (Outside)

**Concurrent position:**

Professor, Graduate School of Business, Osaka City University

**Main area of expertise:**

Corporate Management

**Reason chosen for outside director**

Jinichiro Yamada possesses in-depth expertise in entrepreneurship, management strategy and organizations gained from many years of research. TAIYO HOLDINGS expects that he will use his experience and expertise in corporate management. Accordingly, TAIYO HOLDINGS has selected him as an outside director.

## Audit & Supervisory Board Members (As of June 22, 2019)



**Akihito Sakai**

Full-time Audit & Supervisory Board Member (Outside)

**Main area of expertise:**

Finance, Accounting and Law

**Reason chosen for outside Audit & Supervisory Board member**

Akihito Sakai has considerable knowledge of finance, accounting, and law from his experience in business to date. TAIYO HOLDINGS expects that he will be able to carry out these duties in an appropriate manner. Accordingly, TAIYO HOLDINGS has selected him as an outside Audit & Supervisory Board member.



**Hidenori Sugiura**

Full-time Audit & Supervisory Board Member (Outside)

**Main area of expertise:**

Finance

**Reason chosen for outside Audit & Supervisory Board member**

Hidenori Sugiura has a wealth of experience and expertise in finance, including as a professor and lecturer at universities as a financial expert, based on his business experience in the securities and finance industries. TAIYO HOLDINGS expects that he will be able to carry out these duties in an appropriate manner. Accordingly, TAIYO HOLDINGS has selected him as an outside Audit & Supervisory Board member.



**Masaru Oki**

Audit & Supervisory Board Member

**Main area of expertise:**

Laws, Ordinances and Regulations

**Reason chosen for Audit & Supervisory Board member**

Masaru Oki has in-depth knowledge of the Company Group's operations from many years of business experience at the Company's Group. In addition, he also possesses expertise concerning the laws, ordinances and regulations of various countries based on his more than 15 years of business experience at overseas subsidiaries. TAIYO HOLDINGS expects that he will be able to carry out these duties in an appropriate manner. Accordingly, TAIYO HOLDINGS has selected him as an Audit & Supervisory Board member.



**Asako Aoyama**

Audit & Supervisory Board Member (Outside)

**Concurrent position:**

Executive Officer Transformation Project Leader, Coca-Cola Bottlers Japan Inc.

**Main area of expertise:**

Finance & Accounting and M&A

**Reason chosen for outside Audit & Supervisory Board member**

Asako Aoyama has a wealth of experience and expertise in finance & accounting and M&A as certified public accountant and after serving as an executive officer of companies. TAIYO HOLDINGS expects that she will be able to carry out these duties in an appropriate manner. Accordingly, TAIYO HOLDINGS has selected her as an outside Audit & Supervisory Board member.



## Corporate Governance

### Corporate Governance at TAIYO HOLDINGS

#### Construction of Sound Management Structures

We have a holding company structure. Through its group management and strategic functions, the holding company aims to develop and improve our strategies while optimizing the allocation of resources. The operating subsidiaries under the holding company can act promptly and autonomously. This system enables better response to customers across various markets while also speeding up decision making and boosting operational efficiency. Its aim is to increase profits and help us build corporate value.

#### Basic Philosophy on Corporate Governance

In line with our Management Philosophy and Basic Management Policy, we aim to prosper together with our customers, regional communities, shareholders, employees, business partners, and other stakeholders. We also believe it is necessary for us to embrace social responsibilities and seek to generate profits. To this end, we promote management transparency and endeavor to fulfill our disclosure obligations to support our continued prosperity.

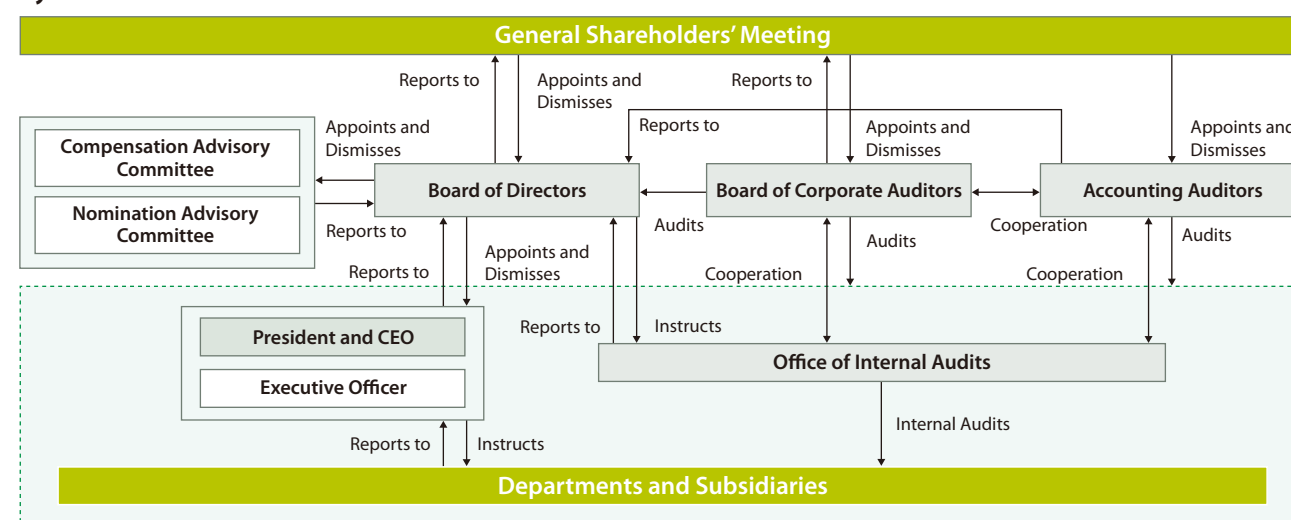
#### Corporate Governance Structures

Our corporate governance system is centered on the Board of Directors and the Audit & Supervisory Board, whose members are both approved by resolution at the Shareholders' Meeting. We have also adopted a system of executive officers with the goal of invigorating the Board of Directors and expediting operational execution.

Executive officers are granted an extensive scope of decision-making authority for carrying out their duties, and it is believed that this will enable rapid decision making. In addition, a discretionary Compensation Advisory Committee was established as an advisory body to the Board of Directors in order to ensure objectivity and transparency in director and executive officer compensation. A discretionary Nomination Advisory Committee was also established to ensure objectivity and transparency in the nomination of directors and Audit & Supervisory Board members. The results of resolutions in both of these bodies are reported to the Board of Directors. Outside members comprise the majorities of both the Compensation Advisory Committee and the Nomination Advisory Committee, and the chairmen of these two committees are selected from among these outside members.

The Board of Directors is composed of nine directors, three of whom are outside directors. The Audit & Supervisory Board is composed of four Audit & Supervisory Board members, three of whom are outside auditors. Meetings of the Board of Directors are held regularly each month, but the Board can also hold extraordinary meetings, if necessary. The Board discusses and resolves important matters and also oversees the representative director's execution of duties. Audit & supervisory board members, including outside auditors, attend most meetings of the Board and Executive Committee, which convene on several occasions each year to engage in discussions and monitor

#### System Outline



Members of the Compensation Advisory Committee		Members of the Nomination Advisory Committee	
Chair	Masayuki Hizume (outside director)	Chair	Masayuki Hizume (outside director)
	Eiji Sato (President and CEO)		Eiji Sato (President and CEO)
	Toshifumi Tamaki (director)		Takayuki Morita (director)
	Keiko Tsuchiya (outside director)		Toshifumi Tamaki (director)
	Jinichiro Yamada (outside director)		Keiko Tsuchiya (outside director)
	Akihito Sakai (outside director)		Jinichiro Yamada (outside director)
	Hidenori Sugiura (outside director)		Akihito Sakai (outside director)
	Asako Aoyama (outside director)		Hidenori Sugiura (outside director)
	Masahiko Todo (attorney)		Asako Aoyama (outside director)
			Masahiko Todo (attorney)

proceedings in detail. The system enables Audit & Supervisory Board members to conduct adequate monitoring of directors' execution of their duties.

The Internal Audit Department, which has a staff of two employees, is fully independent from other Group operations. It conducts audits on all departments of the holding company and operating subsidiaries based on the annual audit plan approved by the Board of Directors. Results of these audits are reported to the Board of Directors and Audit & Supervisory Board.

#### Internal Controls

We regard the construction of a system of internal controls as a critical part of corporate governance. These controls include the five components described below:

- (1) Keeping all directors and employees informed about our CSR (Corporate Social Responsibility) Philosophy and the Code of Conduct.
- (2) The appointment of one director as chief compliance officer to chair the Ethics Committee and lead a team promoting internal business ethics.
- (3) An internal hotline that enables employees to report compliance violations or any related concerns to an external lawyer.
- (4) Regular reports made by the chief compliance officer to the Board of Directors concerning the status of our ethics and compliance framework.
- (5) Establishment of an independent Internal Audit Department that reports audit findings to the Board of Directors, the Audit & Supervisory Board, and, where necessary, to accounting auditors.

In fiscal 2019, we strove to maintain and enhance the effectiveness of our internal controls, centered on responding to priority issues, in accordance with the Basic Plan for Internal Controls for our 73rd accounting period.

1. We created, put in place and began operating internal controls targeting all assessment criteria for TAIYO Pharma.
2. We added business process control and overall IT control to the assessment criteria for TAIYO INK TRADING (SHENZHEN), and commenced operation.
3. By making overseas visits and through other measures, we reviewed internal control documents, striving to enhance the effectiveness of internal controls.

#### Risk Management

The Group has studied and instituted ways of mitigating, or taking appropriate steps in response to, a variety of risks associated with business activities. One director is appointed as "the director in charge of risk management." In addition, the department in charge of risks occurring in the course of natural work operations evaluates and responds to these risks. Furthermore, the Risk Management Committee conducts risk management for all departments throughout the entire Group.



Relief training with a hook-and-ladder truck



## Corporate Governance



Firefighting training

Starting in fiscal 2019, subsidiary TAIYO INK MFG began formally conducting risk assessment for machinery and equipment.

With the goal of preventing accidents and disasters, the subsidiary first identifies potential risks in the workplace and quantifies their degrees according to internally established risk assessment criteria. Based on the results of these analyses, it then clarifies the order of priority for these risks and implements reasonable risk countermeasures. Other than risk assessment, the subsidiary also provides risk prediction training and conducts routine workplace inspections, in addition to other measures. In fiscal 2019, TAIYO INK MFG reported no occupational accidents at either its headquarters or its Ranzan Facility.

### Executive Compensation

At the 71st General Shareholders' Meeting held on June 21, 2017, we received approval for a director's compensation system comprising the payment of base salaries, performance cash bonuses, and, as compensation to executive directors (hereinafter refers to directors as defined in each paragraph of Article 363, Section 1 of the Companies Act),

a stock compensation system comprising restricted stock and performance cash bonus deferral in restricted stock.

This director's compensation system aims to provide incentives to executive directors that encourage them to strive for the sustainable growth of our Group's corporate value and further promote value sharing between our executive directors and our shareholders.

Directors other than executive directors and Audit & Supervisory Board members receive only base salaries as compensation.

In accordance with the framework approved at the General Shareholders' Meeting, the Board of Directors shall determine the calculation method, payment timing, distribution, and other matters concerning the amount of base salary paid to directors, as well as performance cash bonuses, restricted stock, and performance cash bonus deferral in restricted stock awarded to executive directors. Prior to making these decisions, the Compensation Advisory Committee, which is chaired by an outside director and includes a majority of outside committee members, shall conduct an objective comparison and verification of compensation standards using executive compensation survey data from a third-party institution. The committee shall deliberate on compensation policies and compensation levels and then issue its recommendation to the Board of Directors, which shall take the committee's recommendations into account when making a final determination.

Compensation paid to Audit & Supervisory Board members is determined through consultations with these members, within the range approved by the General Shareholders' Meeting.

Executive compensation for the fiscal year ended March 2019 is shown below.

Executive Category	Total Amount of Compensation (Millions of Yen)	Amounts of Compensation by Type (Millions of Yen)					Number of Executives
		Base compensation	Performance-based monetary compensation	Performance-based stock compensation	Restricted stock	Retirement benefits	
Directors (excluding outside directors)	446	105	70	149	121	—	7
Audit & Supervisory Board members (excluding outside Audit & Supervisory Board members)	9	9	—	—	—	—	2
Outside officers	59	59	—	—	—	—	7

## Outside Directors Message

*TAIYO HOLDINGS is supported by its fiery Board of Directors and passionate human resources. How can I contribute?*



Keiko Tsuchiya

TAIYO HOLDINGS has been actively appointing outside directors since its relatively early days and has received high praise for the freshness of this approach, as well as for the scale of its initiatives. Personally, I have experience working as a manager at foreign companies and have spent many years dealing with personnel management affairs, as well as corporate organizational and cultural reforms and leader development. Since I assumed office in 2017, I have utilized the knowledge and perspectives I gained from these experiences to provide specific and practical advice and proposals through lively Board of Directors discussions. In addition to the Board of Directors, I am a member of the Nomination Advisory Committee and the Compensation Advisory Committee, which the Company established voluntarily. Through these roles, I strive to actively participate in management through constructive dialogue.

TAIYO HOLDINGS' Board of Directors includes experts from a variety of fields and is characterized by its easy-to-speak atmosphere that allows us to candidly share our opinions and hold lively discussions. One example that comes to mind is when we discussed medium- to long-term plans; the discussion became so heated that it was not possible to confine it to our pre-set agenda. Board of Directors discussions also frequently end up being deeper than we expected, and we often need to extend meetings or agree to take up the discussion again at the next meeting. Outside directors who are not involved in business execution also raise issues by sharing their perspective, which creates differences in opinion that sometimes lead to constructive discussions. I believe this serves as evidence that the members of our Board of Directors are committed to pursuing governance that is ideal for TAIYO HOLDINGS and are capable of fulfilling related responsibilities. Furthermore, our Board of Directors holds regular reviews for its outside directors and evaluates its own

effectiveness through surveys, which leads me to believe that our governance system is functioning as it should.

We outside directors also visit domestic and overseas bases several times each year in order to deepen our own understanding of the Company. I feel strongly that our largest strength is our human resources, who are filled with the desire to firmly contribute to the future of the TAIYO Group.

We attained growth as a company through our significant strengths in solder resists. However, we have not chosen to simply fall back on this strength and are urgently entering a new phase of wide-ranging expansion into new fields, including full-scale entry into the pharmaceutical business. I believe that efforts like these accurately represent our approach of moving forward as a single, unified company.

We are also taking the lead in terms of ESG activities. For example, the cafeterias in the Ranzan Facility and at headquarters are designed based on concepts related to reducing our burden on nature, local production and consumption of food and creating an environment fit for our employees. From a global perspective, I believe you can sense the desire we have to earnestly create good societies both inside and outside the Company from our promotion of research concerning the use of insects for livestock feed, which is one possible solution to future population explosions. The TAIYO Group is conducting human resource development aimed at ensuring that all of its members can work independently and autonomously and identifies as a corporate group that creates organizations, corporate atmospheres and unique cultures that allow these personnel to flourish.

Moving forward as a member of the management team, I intend to continue offering support based on my point of view as an outside director that will help our governance function more effectively, meeting the expectations of all of our shareholders, as well as the rest of our stakeholders.



Since its establishment in September 1953, TAIYO HOLDINGS has continued to grow thanks to the trust placed in it by its stakeholders, including its shareholders, customers, and business partners.

In order to continue to respond to that trust and grow together, all TAIYO Group directors and employees will fulfill their corporate social responsibilities by taking a consistently forward-looking approach to business activities and observing ethics and laws.

In order to fulfill these responsibilities, TAIYO Group has established a corporate CSR Philosophy and a Code of Conduct, and is involved in a variety of CSR activities

through its CSR organization, which comprises various management systems and committees. The directors and employees of the TAIYO Group will strive to create a company that is trusted by society and is actively involved in CSR activities.

## CSR Philosophy

We will fulfill our corporate social responsibilities, which include complying with the law, protecting the environment, ensuring thorough quality management, and contributing to society.

### Code of Conduct

We will observe the following code to put the Group's CSR Philosophy into practice.

#### 1. Ethical and Legal Compliance

We will observe laws and other social norms, and understanding the spirit thereof, will act openly and fairly.

#### 2. Workplace Environment

We will respect employees' human rights, and create a workplace that is fair and free of discrimination.

#### 3. Fair Business Dealings

We will deal with all our business partners in an honest manner and conduct business with them based on impartial and fair business conditions.

#### 4. Respect for Stakeholders

We will always conduct business activities with respect for the viewpoints of all our stakeholders, and disclose information in a timely and appropriate manner.

#### 5. Ensuring Confidentiality

We will work to ensure the protection of confidential information related to our business partners, the company itself, and any individual.

#### 6. Ensuring Quality (Quality Policy)

We will ensure that we always provide safe, quality products that satisfy our customers.

#### 7. Protecting the Environment

##### (Basic Environmental Philosophy)

We will endeavor to protect the environment as part of the performance of our social responsibility, and will engage in business activities that are in harmony with the environment.

#### 8. Ensuring Information Security

##### (Basic Information Security Philosophy)

In the interests of customer trust and satisfaction, we will work to maintain or improve the confidentiality, integrity, and availability of all our information assets.

#### 9. Social Contributions

As members of society, we will engage in activities that contribute to society.

#### 10. Protecting Intellectual Property

We will take appropriate precautions to protect Taiyo Group's intellectual property rights, and those of third parties.

#### 11. Exclusion of Anti-social Forces

We will take a resolute stance towards anti-social forces and will not respond in any way to illegal or improper demands.

## Compliance

The TAIYO Group continuously strives to increase its credibility by promoting activities that strengthen its internal organization and increase ethical and compliance awareness among all its employees.

Our internal Compliance Promotion Organization spearheads awareness and educational activities to verify that employees understand the TAIYO Group's CSR Philosophy and Code of Conduct and to continuously ensure that activities are aligned with the spirit of our CSR Philosophy and Code of Conduct. In fiscal 2019, the Group made certain highly important activities obligatory. These included the construction of a system for internal consultation and reporting, as well as the system's response status, and compliance education. Having recognized delays in putting in place parts of the system, we will continue with these efforts in fiscal 2020.

## Relationship with Shareholders

Through profit dividends and appropriate communication, we contribute to the wealth and prosperity of all our shareholders.

## Profit Dividends

TAIYO HOLDINGS views cash-based profit returns to its investors as part of its core strategy and distributes sustainable and stable profit returns at a high rate. Specifically, we have established shareholder's equity dividend ratio as a target indicator and aim for a medium- to long-term shareholder's equity dividend ratio of 5% or higher based on consolidated earnings.

Transitions in shareholder's equity dividend ratio (consolidated)

	FY2015	FY2016	FY2017	FY2018	FY2019
Dividend per share (Yen)	90	110	120.1	160.2	130.2
Dividend on equity ratio (%)	5.7	6.5	5.6	6.5	5.3

## Relationship with Suppliers

Based on Green Procurement Standards, we practice the procurement of raw materials that are environmentally-conscious, safe, and contribute to stable quality.

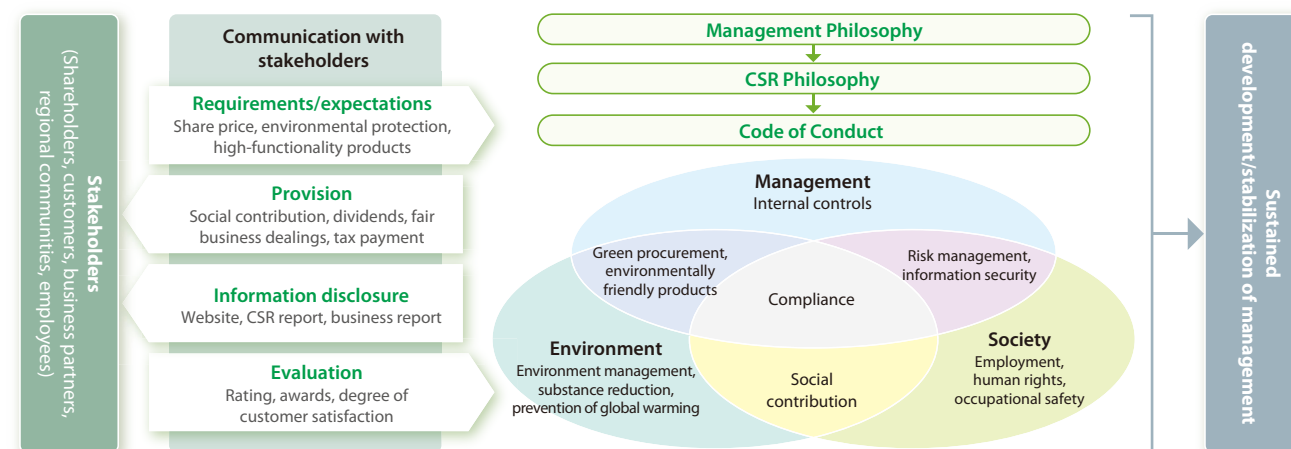
## Implementation of Supplier Evaluations and On-Site Audits

This fiscal year, the Group continued conducting on-site audits in cooperation with suppliers in order to build and strengthen relationships of trust. Audits are conducted by teams made up primarily of personnel from the Purchasing Department and Quality Assurance Division, and in some cases employees from manufacturing, technology and design divisions also participate. Audits are conducted with the aim of enhancing the quality of raw materials and secondary materials.

## Relationship with Local Communities and Society

Working as a member of society to contribute to social development is also a vital corporate responsibility. All member companies of the TAIYO Group partner to conduct wide-ranging activities to ensure our ability to preserve precious, limited resources for future generations, and to exist as a company that grows together with, and enriches the hearts and minds of, everyone with whom we interact.

### Social Contribution Goals of the TAIYO Group





Social Contribution Activities

Blood donation supporters

The TAIYO INK main office encourages employees to participate in blood donation activities. Also, each year employees working at other locations in the TAIYO Group cooperate with visiting blood donation trucks.



Blood donation truck visiting a TAIYO office

Community Contributions

Social Studies Class Tours

At TAIYO INK MFG headquarters, we run plant tours and a chemistry lab for social studies classes at a local elementary school. Supplementary reading materials published for third and fourth graders by the Ranzan Town Board of Education mention TAIYO INK MFG as a topic for a social studies class tour. We will continue offering children opportunities for learning and experiences that help cultivate future talent with local roots.



Local elementary students listen to a lecture

Basic Policy on Environmental Activities

In our CSR Code of Conduct, the Group identifies environmental protection as our basic environmental philosophy, stating: “We will endeavor to protect the environment as part of our social responsibilities and will engage in business activities that are in harmony with the environment.” We recognize protecting people’s health and safety, as well as our irreplaceable planet and its environment, through our environmental management system as a key management issue. To implement environmentally friendly

business administration, we act by sharing this awareness among executives and all employees.

Contribution to Sports Promotion

In January 2019, we reached an affiliation agreement with Nozomi Okuhara, a professional Badminton player.

Based on its Management Philosophy, TAIYO HOLDINGS has consistently worked to create products that contribute to the world at large. It is striving to establish a “fun society” through sports-related social contributions, including participation in and cosponsorship of local sports competitions, as well as support for local sports organizations and young athletes, and activities that contribute to local communities.



Eiji Sato (President and CEO) and Nozomi Okuhara

Environmental Achievements

Recognized by Apple (USA) as a New Renewable Energy Project Supplier

On April 10, 2018, Apple announced nine companies that will participate in initiatives aimed at achieving 100% Renewable Energy as manufacturing partners. TAIYO INK was selected as one of these nine companies and has promised to conduct its manufacturing using 100% clean energy.

In addition to its two Ranzan-machi floating solar power plants, the Group established five power plants in 2019, bringing its total number of active floating solar power plants to seven.



Ranzan Onuma Floating Solar Power Plant

Financial Section



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## Financial Section

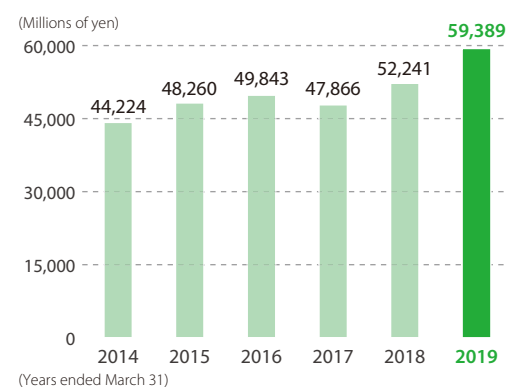
### Six-Year Summary

TAIYO HOLDINGS CO., LTD. and Consolidated Subsidiaries

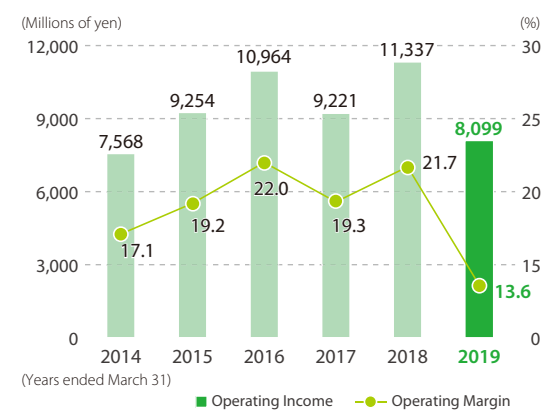
The years ended March 31

	2014	2015	2016	2017	2018	2019
						Millions of yen
<b>For the year:</b>						
Net sales	44,224	48,260	49,843	47,866	52,241	59,389
Cost of sales	28,348	28,865	27,355	26,220	27,304	33,043
Selling, general and administrative expenses	8,307	10,139	11,522	12,424	13,599	18,247
Operating income	7,568	9,254	10,964	9,221	11,337	8,099
Profit attributable to owners of parent	4,930	6,667	7,796	6,398	4,856	4,396
Depreciation	1,181	1,411	1,891	2,485	2,284	3,357
Net cash provided by (used in) operating activities	7,020	9,232	10,546	9,042	8,100	5,907
Net cash provided by (used in) investing activities	(3,839)	(2,913)	(6,750)	(1,063)	(24,161)	(5,487)
Net cash provided by (used in) financing activities	2,350	(9,919)	(2,740)	20,342	11,319	(12,001)
<b>At year-end:</b>						
Total assets	58,369	61,241	65,464	92,386	111,490	105,666
Total property, plant and equipment	14,375	16,865	19,644	18,389	17,923	22,313
Total liabilities	15,713	19,929	20,214	20,540	38,467	35,146
Non-controlling interests	2,045	2,238	2,135	782	363	337
Total net assets	42,655	41,312	45,250	71,846	73,023	70,520
						Yen
<b>Per share data:</b>						
Basic earnings	193.83	264.05	337.99	266.46	168.55	152.71
Dividend	120.00	90.00	110.00	120.10	160.20	130.20
Net assets	1,596.45	1,703.14	1,865.94	2,468.99	2,520.68	2,475.36
						%
<b>Ratios:</b>						
Operating margin	17.1	19.2	22.0	19.3	21.7	13.6
Return on equity	12.8	16.7	19.0	11.2	6.8	6.2
Equity ratio	69.6	63.8	65.9	76.9	65.2	66.4
						Shares
<b>Common stock:</b>						
Total issued shares	27,464,000	27,464,000	27,485,600	28,841,100	28,865,194	28,910,436

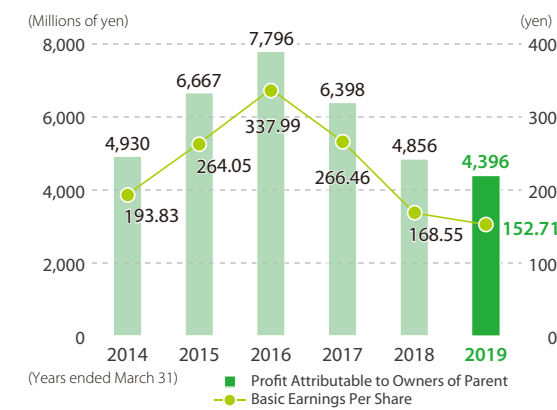
#### Net Sales



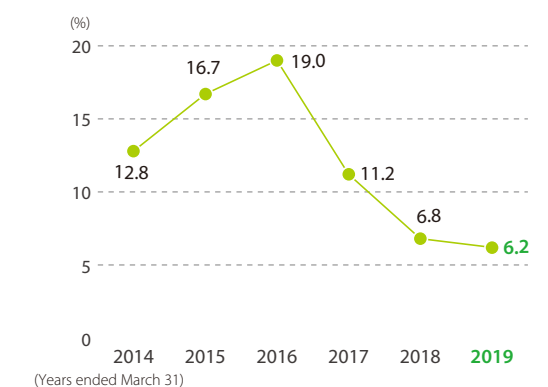
#### Operating Income and Operating Margin



#### Profit Attributable to Owners of Parent and Basic Earnings Per Share



#### Return on Equity





## Financial Section

### Management's Discussion and Analysis

This document presents consolidated results for fiscal year 2019, comprising the accounts of TAIYO HOLDINGS and its domestic and overseas subsidiaries for the year ended March 31, 2019.

#### Operating Results

Net sales for the consolidated fiscal year ended March 31, 2019 were ¥59,389 million (up 13.7% year on year). Operating income was down 28.6% to ¥8,099 million, ordinary profit was down 28.4% to ¥8,014 million and profit attributable to owners of parent was down 9.5% to ¥4,396 million.

#### The consolidated results were as follows:

	(Millions of yen)	
Net sales	¥59,389	(up 13.7%)
Operating income	8,099	(down 28.6%)
Ordinary profit	8,014	(down 28.4%)
Profit attributable to owners of parent	4,396	(down 9.5%)

#### Reasons for decline in profit attributable to owners of parent:

In April 2018, we acquired all outstanding shares in Micro Network Technologies Corp., with the aim of overhauling our IT systems. During its first year as our consolidated subsidiary, the company performed below the level expected. Accordingly, we estimated the company's business value prudently and conservatively, and wrote off unamortized goodwill.

#### Results by segment were as follows:

The Group divides its business into two segments, Elec-

tronics Materials and Medical and Pharmaceuticals, based on operating subsidiaries.

#### Electronics materials:

Sales of PKG board materials benefitted from brisk demand for memory-related materials. However, overall sales were hampered by factors in the electronic components industry, including slowing growth in the smartphone and tablet markets, customer inventory adjustments due to trade friction between the U.S. and China, and the steep rise in material prices caused by the strengthening of environmental regulations in China. As a result, net sales fell 3.5% year on year to ¥48,086 million, and segment profit fell 13.3% year on year to ¥10,501 million. Segment assets declined 3.2% to ¥50,747 million, reflecting reductions in cash/cash equivalents and trade receivables.

#### Medical and Pharmaceuticals:

Established in August 2017, TAIYO Pharma Co., Ltd. acquired marketing authorizations, including marketing and manufacturing rights, on 13 long-listed products and fully launched the medical and pharmaceutical business in January 2018. The long-listed products were gradually transferred into several product groups and the transfer of all products to TAIYO Pharma Co., Ltd. was completed in the consolidated fiscal year under review. This resulted in net sales of ¥7,661 million and a segment loss of ¥351 million. We have not compared the fiscal year under review to the previous fiscal year due to the difference in operating periods. Segment assets increased 6.5% to ¥28,313 million, reflecting increases in trade receivables and inventory assets.

### Segment Information

Information regarding net sales, profit or loss, assets and liabilities, and other items by reportable segment  
FY2018

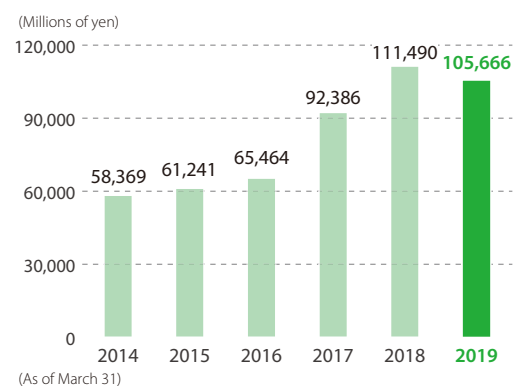
	Reportable segment			Other (Note 1)	Total
	Electronics materials	Medical and pharmaceuticals business	Total		
Net sales					
External sales	49,854	819	50,673	1,567	52,241
Inter-segment sales or transfers	—	—	—	3	3
Total	49,854	819	50,673	1,570	52,244
Segment income	12,114	8	12,123	97	12,220
Segment assets	52,411	26,580	78,992	2,819	81,811
Other items					
Depreciation (Note 2)	1,331	353	1,684	145	1,830
Increase in property, plant and equipment and intangible assets	993	20,948	21,942	195	22,137

#### FY2019

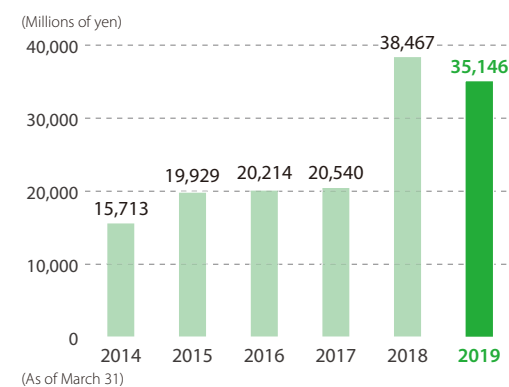
	Reportable segment			Other (Note 1)	Total
	Electronics materials	Medical and pharmaceuticals business	Total		
Net sales					
External sales	48,086	7,661	55,747	3,642	59,389
Inter-segment sales or transfers	—	—	—	106	106
Total	48,086	7,661	55,747	3,748	59,496
Segment income (loss)	10,501	(351)	10,149	(175)	9,973
Segment assets	50,747	28,313	79,061	5,539	84,600
Other items					
Depreciation (Note 2)	1,278	1,453	2,731	179	2,910
Increase in property, plant and equipment and intangible assets	4,733	706	5,440	1,484	6,924

(Notes) 1. "Other" indicates business segments that we do not include among the reportable segments. Examples include our business of manufacturing dyes, pigments, and other chemical products; our business of developing software; and our business of generating renewable energy.  
2. Depreciation does not include amortization of goodwill.

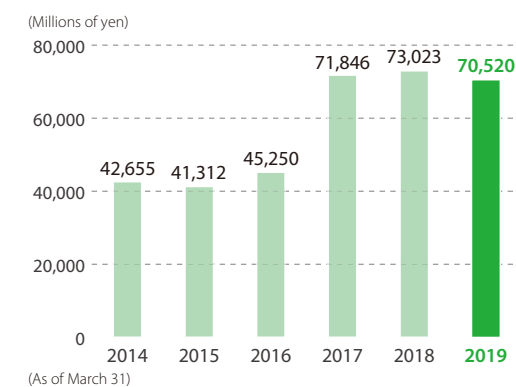
#### Total Assets



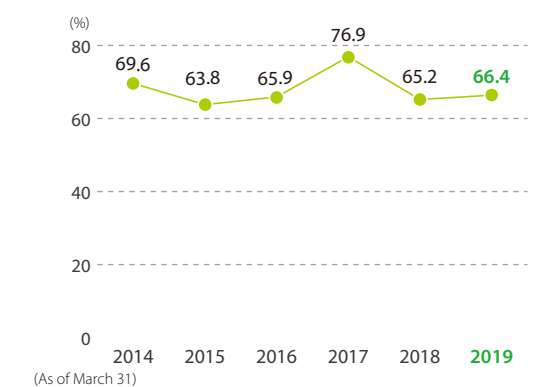
#### Total Liabilities



#### Total Net Assets



#### Equity Ratio





## Financial Section

### Financial Position

The table below shows year-on-year changes in assets, liabilities and net assets, as well as the main factors for these changes.

	Previous year (Million yen)	Fiscal year under review (Million yen)	Change (Million yen)	Main factors (YoY change)
Current assets	¥ 68,373	¥ 58,136	¥(10,236)	Cash and deposits down ¥13,247 million, merchandise and finished goods up ¥1,176 million, and raw materials and supplies ¥1,233 million.
Non-current assets	43,116	47,529	4,412	Buildings and structures up ¥900 million, machinery, equipment and vehicles, net up ¥1,213 million, and construction in progress up ¥2,249 million.
Total assets	111,490	105,666	(5,824)	
Total liabilities	38,467	35,146	(3,320)	Long-term loans payable down ¥3,479 million.
Total net assets	73,023	70,520	(2,503)	Profit attributable to owners of parent down ¥4,396 million, dividends of surplus down ¥4,627 million, and purchase of treasury shares down ¥1,992 million.

### Cash Flows

The following table shows the cash flows in the consolidated fiscal year under review, as well as the factors behind these cash flows.

	Previous year (Million yen)	Fiscal year under review (Million yen)	Main factors
Net cash provided by (used in) operating activities	¥ 8,100	¥ 5,907	Cash inflows included ¥6,703 million in profit before income taxes and ¥3,357 million in depreciation. Payment of income taxes resulted in a cash outflow of ¥3,757 million.
Net cash provided by (used in) investing activities	(24,161)	(5,487)	Cash outflows included ¥4,183 million for acquisition of property, plant and equipment and ¥1,227 million for acquisition of intangible assets.
Net cash provided by (used in) financing activities	11,319	(12,001)	Cash outflows included ¥4,625 million in payment of dividends and ¥6,622 million in repayments of long-term loans payable.
Net increase (decrease) in cash and cash equivalents	(4,844)	(11,715)	
Cash and cash equivalents at end of period	41,816	30,101	

### Business Risks

The following are the main risks that may influence the business development of the Group. The information below includes projections and other forward-looking statements. These forward-looking are based on information available to us as of the end of the consolidated fiscal year under review. They are not guarantees of future performance.

#### (1) Credit risk

We have a large customer base, and we avoid concentrating our receivables onto a handful of large customers. Nonetheless, if our debtors fall into financial difficulties, the resulting bad debt may negatively affect our consolidated performance.

#### (2) Procurement risk

We procure many of our raw materials from outside the Group. If these external suppliers suffer a disaster or other problems in the supply chain arise, our production activities may be impaired, in turn affecting our performance.

#### (3) Risk of rise in raw material prices

We use many kinds of raw materials. Some of these materials are derived from crude oil. Oil market trends may cause the price of some raw materials to rise, which may in turn affect our performance.

#### (4) Technological innovation risk

In our electronics materials segment, we rely heavily on PWB materials—especially solder resists. The majority of the segment's sales stem from manufacturing and marketing these items. Technological progress may generate manufacturing techniques that do not rely on our products (such as techniques for making electronic parts without PWBs or making PWBs without solder resists). If such techniques were to be widely adopted, demand for our products would plummet.

This eventuality is unlikely to occur in the foreseeable future given the attributes, operability, and economic viability of the products in question. Nonetheless, we have made exploring the potential for new PWB techniques a top priority in our R&D efforts.

#### (5) Patent risk

In the electronics materials segment, we use patents and other forms of intellectual property rights to protect our products and technologies from unauthorized use. However, we may not always succeed in this regard. For example, a patent application might ultimately fail to give us the rights we require, or someone might file a request for the patent to be invalidated. Moreover, if we infringe upon another's intellectual property rights, we might be required to pay royalties or a vast amount of compensation. Such a scenario would adversely affect our consolidated performance.

#### (6) Country-specific risks

In the electronic materials segment, we have production bases in Japan, Taiwan, South Korea, China, and the U.S., and we are expanding sales globally—particularly in China, Taiwan, South Korea, and the ASEAN regions. Risks particular to these countries may impact our business strategy or consolidated performance. Examples of such country-specific risks include terrorist incidents, political strife, economic turbulence, natural disasters, epidemics, or sudden changes in the country's legal, regulatory, or tax environment.

#### (7) Exchange rate risk

In the electronics materials segment, overseas sales account for a large share of total net sales, and we often denominate sales prices in foreign currencies. As such, exchange rate fluctuations may impact our performance. In our case, a high yen usually spells lower revenue and profits.

#### (8) Risk of price fluctuations in key products

With PWB production increasingly shifting to China and elsewhere in Asia, the electronics materials segment's solder resists are subject to intense price competition with local and Japanese-owned firms. Solder resist prices may be driven down further by competition over PWB prices. Since solder resists are a mainstay product for us, a decline in their prices may impact our consolidated performance.

#### (9) Demand risk

Trends in the electronics component market affect demand for the electronics materials segments' main products, and may, by extension, impact our consolidated performance.

#### (10) Side-effects of pharmaceuticals

The medical and pharmaceuticals segment markets pharmaceuticals in compliance with all applicable laws and standards. Nonetheless, once sold, the segment's pharmaceuticals may end up being associated with side-effects. Unanticipated side-effects could potentially impact our performance.

#### (11) Pharmaceutical regulation

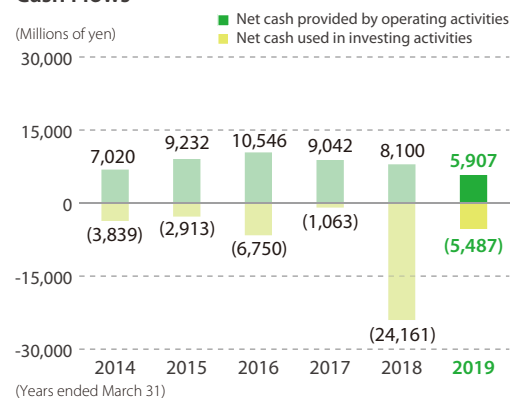
The medical and pharmaceuticals segment is vulnerable to changes in the regulatory environment, including revisions to government policies regulating pharmaceutical prices or reforms to the healthcare insurance system. Such changes may impact our performance.

#### (12) Risk of non-current asset loss

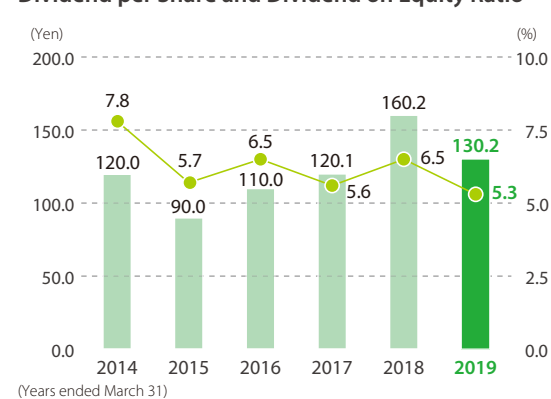
If group assets markedly decline in fair value, or if the Group's businesses become unprofitable, we would apply loss accounting and record impairment loss for the non-current assets. This scenario could potentially impact the Group's performance and financial position.

We intend to further expand our market share in solder resist materials, but we also want to offset the above risks. Accordingly, we will keep developing new products that can serve as a secondary source of revenue. We will also establish a business structure to help us bring new innovations to market as quickly as possible. Steadily implemented measures along these lines will enable us to achieve sustained growth.

#### Cash Flows



#### Dividend per Share and Dividend on Equity Ratio



## Financial Section

### Consolidated Balance Sheet

TAIYO HOLDINGS CO., LTD. and Consolidated Subsidiaries

March 31, 2019 and 2018

	(Millions of yen)	
	As of March 31, 2018	As of March 31, 2019
<b>Assets</b>		
Current assets		
Cash and deposits	¥ 44,588	¥ 31,340
Notes and accounts receivable—trade	15,509	16,610
Merchandise and finished goods	3,499	4,676
Work in process	405	495
Raw materials and supplies	2,042	3,275
Other	2,456	1,825
Allowance for doubtful accounts	(127)	(87)
Total current assets	68,373	58,136
Non-current assets		
Property, plant and equipment		
Buildings and structures, net	9,990	10,891
Machinery, equipment and vehicles, net	2,791	4,005
Tools, furniture and fixtures, net	989	900
Land	3,906	4,022
Construction in progress	240	2,489
Other	5	3
Total property, plant and equipment	17,923	22,313
Intangible assets		
Goodwill	674	691
Sales rights	20,555	19,732
Other	589	1,013
Total intangible assets	21,818	21,436
Investments and other assets		
Investment securities	2,231	2,125
Shares of subsidiaries and associates	19	295
Deferred tax assets	264	225
Retirement benefit asset	326	319
Other	677	1,006
Allowance for doubtful accounts	(144)	(193)
Total investments and other assets	3,374	3,779
Total non-current assets	43,116	47,529
Total assets	¥111,490	¥105,666

	(Millions of yen)	
	As of March 31, 2018	As of March 31, 2019
<b>Liabilities</b>		
Current liabilities		
Notes and accounts payable—trade	¥ 7,769	¥ 6,285
Short-term loans payable	2,145	4,011
Current portion of long-term loans payable	6,116	3,852
Accounts payable—other	1,853	4,100
Income taxes payable	1,448	610
Provision for bonuses	510	499
Other	648	1,353
Total current liabilities	20,491	20,714
Non-current liabilities		
Deferred tax liabilities	1,458	1,190
Long-term loans payable	15,923	12,443
Retirement benefit liability	116	117
Asset retirement obligations	397	570
Other	79	109
Total non-current liabilities	17,975	14,431
Total liabilities	38,467	35,146
<b>Net assets</b>		
Shareholders' equity		
Capital stock	9,232	9,331
Capital surplus	14,717	14,817
Retained earnings	47,415	47,229
Treasury shares	(121)	(2,042)
Total shareholders' equity	71,244	69,336
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	321	94
Foreign currency translation adjustment	1,084	730
Remeasurements of defined benefit plans	9	22
Total accumulated other comprehensive income	1,415	846
Non-controlling interests	363	337
Total net assets	73,023	70,520
Total liabilities and net assets	¥111,490	¥105,666



## Financial Section

### Consolidated Statement of Income

TAIYO HOLDINGS CO., LTD. and Consolidated Subsidiaries

March 31, 2019 and 2018

	(Millions of yen)	
	Fiscal year ended March 31, 2018	Fiscal year ended March 31, 2019
Net sales	¥52,241	¥59,389
Cost of sales	27,304	33,043
Gross profit	24,937	26,346
Selling, general and administrative expenses	13,599	18,247
Operating income	11,337	8,099
Non-operating income		
Interest income	78	81
Dividend income	18	23
Subsidy income	45	40
Other	71	70
Total non-operating income	214	215
Non-operating expenses		
Interest expenses	127	196
Commission expenses	—	23
Foreign exchange losses	208	21
Loss on investments in partnership	—	32
Other	17	25
Total non-operating expenses	352	300
Ordinary profit	11,199	8,014
Extraordinary income		
Subsidy income	24	—
Gain on sales of investment securities	16	—
Total extraordinary income	40	—
Extraordinary losses		
Amortization of goodwill	3,278	—
Impairment loss	—	1,311
Other	19	—
Total extraordinary losses	3,298	1,311
Profit before income taxes	7,941	6,703
Income taxes—current	3,040	2,387
Income taxes—deferred	(24)	(127)
Total income taxes	3,016	2,259
Profit	4,925	4,443
Profit attributable to non-controlling interests	69	46
Profit attributable to owners of parent	¥ 4,856	¥ 4,396

### Consolidated Statement of Comprehensive Income

TAIYO HOLDINGS CO., LTD. and Consolidated Subsidiaries

March 31, 2019 and 2018

	(Millions of yen)	
	Fiscal year ended March 31, 2018	Fiscal year ended March 31, 2019
Profit	¥4,925	¥4,443
Other comprehensive income		
Valuation difference on available-for-sale securities	125	(227)
Foreign currency translation adjustment	(45)	(358)
Remeasurements of defined benefit plans, net of tax	8	12
Total other comprehensive income	89	(573)
Comprehensive income	5,014	3,869
Comprehensive income attributable to		
Comprehensive income attributable to owners of parent	5,333	3,827
Comprehensive income attributable to non-controlling interests	(318)	42

## Financial Section

## Consolidated Statement of Changes in Equity

TAIYO HOLDINGS CO., LTD. and Consolidated Subsidiaries

March 31, 2019 and 2018

	(Millions of yen)				
	Shareholders' equity				
Fiscal year ended March 31, 2018	Capital stock	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
Balance at beginning of current period	9,171	¥14,824	¥46,308	¥(178)	¥70,125
Changes of items during period					
Dividends of surplus			(3,748)		(3,748)
Profit attributable to owners of parent			4,856		4,856
Purchase of shares of consolidated subsidiaries		(167)			(167)
Issuance of new shares	60	60			121
Purchase of treasury shares				(0)	(0)
Disposal of treasury shares				57	57
Net changes of items other than shareholders' equity					
Total changes of items during period	60	(106)	1,107	56	1,118
Balance at end of current period	9,232	¥14,717	¥47,415	¥(121)	¥71,244

	(Millions of yen)					
	Accumulated other comprehensive income				Non-controlling interests	Total net assets
	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
Balance at beginning of current period	¥195	¥ 741	¥0	¥ 938	¥ 782	¥71,846
Changes of items during period						
Dividends of surplus						(3,748)
Profit attributable to owners of parent						4,856
Purchase of shares of consolidated subsidiaries						(167)
Issuance of new shares						121
Purchase of treasury shares						(0)
Disposal of treasury shares						57
Net changes of items other than shareholders' equity	125	342	8	476	(418)	58
Total changes of items during period	125	342	8	476	(418)	1,177
Balance at end of current period	¥321	¥1,084	¥9	¥1,415	¥ 363	¥73,023

	(Millions of yen)				
	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
<b>Fiscal year ended March 31, 2019</b>					
Balance at beginning of current period	9,232	¥14,717	¥47,415	¥ (121)	¥71,244
Changes of items during period					
Dividends of surplus			(4,627)		(4,627)
Profit attributable to owners of parent			4,396		4,396
Issuance of new shares	99	99			199
Purchase of treasury shares				(1,992)	(1,992)
Disposal of treasury shares				71	71
Effect resulting from change of accounting period of consolidated subsidiaries			44		44
Net changes of items other than shareholders' equity					
Total changes of items during period	99	99	(186)	(1,921)	(1,907)
Balance at end of current period	9,331	¥14,817	¥47,229	¥(2,042)	¥69,336

	(Millions of yen)					
	Accumulated other comprehensive income				Non-controlling interests	Total net assets
	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
Balance at beginning of current period	¥ 321	¥1,084	¥ 9	¥1,415	¥363	¥73,023
Changes of items during period						
Dividends of surplus						(4,627)
Profit attributable to owners of parent						4,396
Issuance of new shares						199
Purchase of treasury shares						(1,992)
Disposal of treasury shares						71
Effect resulting from change of accounting period of consolidated subsidiaries						44
Net changes of items other than shareholders' equity	(227)	(354)	12	(569)	(26)	(595)
Total changes of items during period	(227)	(354)	12	(569)	(26)	(2,503)
Balance at end of current period	¥ 94	¥ 730	¥22	¥ 846	¥337	¥70,520

## Consolidated Statement of Cash Flows

TAIYO HOLDINGS CO., LTD. and Consolidated Subsidiaries

March 31, 2019 and 2018

		(Millions of yen)
	Fiscal year ended March 31, 2018	Fiscal year ended March 31, 2019
Cash flows from operating activities		
Profit before income taxes	¥ 7,941	¥ 6,703
Depreciation	2,284	3,357
Impairment loss	—	1,311
Amortization of goodwill	3,535	350
Commission expenses	—	23
Loss (gain) on investments in partnership	—	32
Loss (gain) on sales of short-term and long-term investment securities	(16)	—
Subsidy income	(24)	—
Decrease (increase) in retirement benefit asset	15	18
Increase (decrease) in retirement benefit liability	(10)	1
Increase (decrease) in allowance for doubtful accounts	14	(72)
Increase (decrease) in provision for bonuses	72	18
Interest and dividend income	(97)	(105)
Interest expenses	127	196
Decrease (increase) in consumption taxes refund receivable	(1,759)	1,571
Decrease (increase) in notes and accounts receivable—trade	(2,030)	(1,205)
Decrease (increase) in inventories	(1,508)	(2,478)
Increase (decrease) in notes and accounts payable—trade	1,653	(1,341)
Other, net	(171)	1,396
Subtotal	10,025	9,778
Interest and dividend income received	92	106
Interest expenses paid	(123)	(219)
Proceeds from subsidy income	24	—
Income taxes paid	(1,918)	(3,757)
Net cash provided by (used in) operating activities	8,100	5,907
Cash flows from investing activities		
Payments into time deposits	(4,379)	(2,103)
Proceeds from withdrawal of time deposits	3,846	3,536
Purchase of property, plant and equipment	(1,381)	(4,183)
Purchase of intangible assets	(21,192)	(1,227)
Purchase of investment securities	(1,021)	(597)
Payments for sales of shares of subsidiaries resulting in change in scope of consolidation	(10)	—
Purchase of shares of subsidiaries resulting in change in scope of consolidation	—	(844)
Other, net	(22)	(66)
Net cash provided by (used in) investing activities	(24,161)	(5,487)
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	1,097	1,254
Proceeds from long-term loans payable	15,100	—
Repayments of long-term loans payable	(502)	(6,622)
Purchase of treasury shares	—	(2,016)
Cash dividends paid	(3,748)	(4,625)
Dividends paid to non-controlling interests	(85)	(68)
Proceeds from issuance of common shares	—	77
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(538)	—
Other, net	(3)	(1)
Net cash provided by (used in) financing activities	11,319	(12,001)
Effect of exchange rate change on cash and cash equivalents	(102)	(134)
Net increase (decrease) in cash and cash equivalents	(4,844)	(11,715)
Cash and cash equivalents at beginning of period	46,661	41,816
Cash and cash equivalents at end of period	¥ 41,816	¥ 30,101



# Corporate Information

## Domestic Network

<b>TAIYO HOLDINGS CO., LTD. Head Office</b> 16F, Metropolitan Plaza Bldg., 1-11-1 Nishi-Ikebukuro, Toshima-ku, Tokyo 171-0021, Japan	<b>TAIYO Fine Chemicals Co., Ltd.</b> 35-3 Akaizawa, Nihonmatsu-shi, Fukushima 964-0982, Japan
<b>TAIYO HOLDINGS CO., LTD. Ranzan Facility</b> 388 Ohkura, Ranzan-machi, Hiki-gun, Saitama 355-0222, Japan	<b>TAIYO GREEN ENERGY CO., LTD.</b> 388 Ohkura, Ranzan-machi, Hiki-gun, Saitama 355-0222, Japan
<b>TAIYO INK MFG. CO., LTD.</b> 900 Hirasawa, Ranzan-machi, Hiki-gun, Saitama 355-0215, Japan	<b>TAIYO Pharma Co., Ltd.</b> 3F, Otemachi Financial City Grand Cube, 1-9-2 Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan
<b>TAIYO INK MFG. CO., LTD. Kitakyushu Plant</b> 1-1 Kurosakishiroishi, Yahatanishi-ku, Kitakyushu-City Fukuoka 806-0004, Japan	<b>TAIYO Pharma Tech Co., Ltd.</b> 4-38, Aketa-cho, Takatsuki-shi, Osaka 569-0806, Japan
<b>TAIYO INK MFG. CO., LTD. Kansai Sales Office</b> FIS Bldg. Room 611, 403 Shimomaruya-cho, 2-chome Nijo-kudaru, Kawaramachidori, Nakagyo-ku, Kyoto 604-8006, Japan	<b>Micro Network Technologies Corp.</b> 18F, Otemachi Financial City Grand Cube, 1-9-2 Otemachi Chiyoda-ku, Tokyo 100-0004, Japan

Note: On November 1, 2019, Thou-Management Corporation was dissolved and merged into Micro Network Technologies Corp.

## Global Network

Company	Voting Shares Held	Business Description
TAIWAN TAIYO INK CO., LTD.	100.00%	Manufacture and marketing of PWB materials
TAIYO INK MFG. CO., (KOREA) LTD.	90.40%	Manufacture and marketing of PWB and FPD materials
TAIYO INK (SUZHOU) CO., LTD.	100.00%	Manufacture and marketing of PWB materials
TAIYO AMERICA, INC.	100.00%	Manufacture and marketing of PWB materials
ONSTATIC TECHNOLOGY CO., LTD.	100.00%	Manufacture and marketing of PWB materials
ONSTATIC INK (SHENZHEN) CO., LTD.	*1	Manufacture and marketing of PWB materials
TAIYO INK INTERNATIONAL (SINGAPORE) PTE LTD	100.00%	Marketing of PWB materials
TAIYO INK INTERNATIONAL (HK) LIMITED	100.00%	Marketing of PWB materials
TAIYO INK TRADING (SHENZHEN) CO., LTD.	100.00%	Marketing of PWB materials
TAIYO INK PRODUCTS CO., LTD.	100.00%	Marketing of PWB materials
TAIYO TRADING (THAILAND) CO., LTD.	100.00%	Marketing of PWB materials

\*1 ONSTATIC INK (SHENZHEN) CO., LTD. is a wholly-owned subsidiary of ONSTATIC TECHNOLOGY CO., LTD.

## Production and Marketing Subsidiaries

### Taiwan

**TAIWAN TAIYO INK CO., LTD.**  
No.7, Datong 2nd Rd., Guanyin Industry Park, Guanyin Dist., Taoyuan City 32849, Taiwan (R.O.C.)

### ONSTATIC TECHNOLOGY CO., LTD.

7F., No.1, Ren' ai Rd., Yingge Dist., New Taipei City 239, Taiwan (R.O.C.)

### Korea

**TAIYO INK MFG. CO., (KOREA) LTD.**  
166, Manhae-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Korea

## Marketing Subsidiaries

### Singapore

**TAIYO INK INTERNATIONAL (SINGAPORE) PTE LTD**  
133 New Bridge Road, #09-08 Chinatown Point, Singapore 059413

### Hong Kong

**TAIYO INK INTERNATIONAL (HK) LIMITED**  
Room 2305, 23/F, The Metropolis Tower, 10 Metropolis Drive, Hunghom, Kowloon, Hong Kong

### Korea

**TAIYO INK PRODUCTS CO., LTD.**  
7F & 8F Hanjoong Bldg. 8, Singil-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Korea

### China

**TAIYO INK (SUZHOU) CO., LTD.**  
No.26 Taishan Road, Suzhou New District, Suzhou City, Jiangsu, P.R.China

### ONSTATIC INK (SHENZHEN) CO., LTD.

Building No 38, Western Industrial Zone, Sha-Yi Village, Sha-Jing Town, Shenzhen City, Guangdong Province, P.R.China

### USA

**TAIYO AMERICA, INC.**  
2675 Antler Drive, Carson City, NV89701, U.S.A.

### China

**TAIYO INK TRADING (SHENZHEN) CO., LTD.**  
Rm1509-1512, Office Tower, Shun Hing Square Di Wang Comm. Centre, 5002 Shen Nan Dong Road, Luo Hu District, Shenzhen City, Guangdong Province, P.R.China

### Thailand

**TAIYO TRADING (THAILAND) CO., LTD.**  
Pearl Bangkok 603, 1177 Phahonyothin Rd, Khwaeng Samsen Nai, Khet Phaya Thai, Bangkok 10400, Thailand

## Company Overview (As of March 31, 2019)

<b>Name</b>	TAIYO HOLDINGS CO., LTD.	<b>Capital</b>	¥9,331 million
<b>Head office</b>	16F, Metropolitan Plaza Bldg., 1-11-1 Nishi-Ikebukuro, Toshima-ku, Tokyo 171-0021, Japan	<b>Shares authorized</b>	50,200,000
		<b>Total number of issued shares</b>	28,910,436
<b>TEL</b>	81-3-5953-5200	<b>Stock listing</b>	Tokyo
<b>Established</b>	September 29, 1953	<b>Number of shareholders</b>	6,106

## Major Shareholders

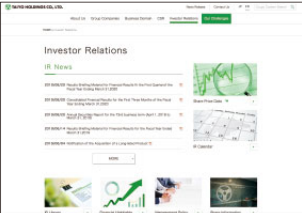
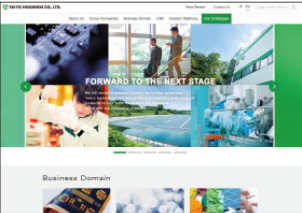
Name	Shares held (Thousands)	% of outstanding shares (excluding treasury shares)
DIC Corporation	5,617	19.69
Kowa Co., Ltd.	3,936	13.80
Japan Trustee Services Bank, Ltd. (Trust account)	1,601	5.61
The Master Trust Bank of Japan, Ltd. (Trust account)	1,416	4.97
Misaki Engagement Master Fund HSBC (proxy)	1,415	4.96
SMBC Trust Bank Ltd. (shares entrusted to Sumitomo Mitsui Banking Corporation retirement benefit trust account)	1,116	3.91
SHIKOKU CHEMICALS CORPORATION	745	2.61
Mitsuo Kawahara	620	2.18
Toshin Yushi Co., Ltd.	538	1.89
THE BANK OF NEW YORK MELLON 140042 (Standing proxy: Mizuho Bank, Ltd.)	460	1.61
	17,468	61.22

### Accessing Our Investor Information Site:

#### An Introduction to TAIYO HOLDINGS Website

TAIYO HOLDINGS is committed to providing a full range of information to all stakeholders including shareholders, investors, customers, and business partners.

<http://www.taiyo-hd.co.jp/en/>



## Stock Price and Trading Volume (Tokyo Stock Exchange)

