

**BRAND STATEMENT** 

# Happy people create a happy world.

"Don't be afraid to fail."

Because what we learn from that failure drives us forward.

Let's enjoy a challenge
without having the fear to make a mistake.
Let's enjoy change to create the norm of tomorrow.
Let's look forward to the future
having a vision of a happier world.

Let's not limit ourselves.

With chemistry as our strength,
let's try to venture further.

Now is the time to sketch a new world.

TAIYO HOLDINGS Integrated Report 2021 2



### **Editorial Policy**

This marks Taiyo Holdings' first-ever integrated report. Our goal is for the integrated report to become an important tool for fostering understanding of Taiyo Holdings' unique initiatives and business activities aimed at collaborative value creation. This report also conveys our current strengths and challenges along with our future ambitions aimed at our Beyond Imagination 2030 long-term management plan announced in June 2021, using clear and concise language. We intend to utilize this report as a key tool for fostering mutual understanding with our stakeholders going forward.

### **Guidelines Referenced**

- International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC)
- Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation of the Ministry of Economy, Trade and Industry (METI)
- Chemicals Industry Standard of the Sustainability Accounting Standards Board (SASB)

and others

### Period Covered

April 1, 2020 to March 31, 2021 (In some cases this report includes information covering other periods.)

### **Reporting Boundary**

Taiyo Holdings Co., Ltd. and its Group companies in Japan and overseas

**Management Philosophy** 

To achieve "a cheerful society"

by further advancing every technology
in our Group and by creating a wide range
of innovative products to fulfill
the dreams of the world.

# **History of Value Creation**

—An engineer becomes a true professional when they create something that is useful for society.

Launched in 1953 to fulfill our founder's maxim, Taiyo Holdings has grown to be a key provider of high value-added products in the electronics field.

Today, we are using our technological capabilities and strong business foundation to create value in new fields ranging from medical and pharmaceuticals to food and energy.

# **Since 1953**

# Providing world-class solder resist technology for innovation in the electronics industry

### 1953

### Taiyo Ink Mfg. established

Taiyo Ink Mfg. Co., Ltd. was established as a manufacturing and marketing company for printing ink in Minato-ku, Tokyo. *Taiyo*, the Japanese word for sun, was chosen as the company name to reflects our desire to be a light for society and useful for people everywhere.



### 1984

### Introduction of liquid photo-imageable SR

The company introduced a high-precision liquid photo-imageable (LPI) SR for high-density printed wiring boards (PWBs). The following year, we filed for a basic patent for liquid alkaline LPI SR (PSR-4000) and subsequently registered patents in the United Kingdom, United States, France, Germany, and Japan along with improvement patents in core countries.



### 1976

# Shift of focus to chemicals for the electronics industry

The company made a major shift in business policy and switched from its founding business in printing ink to providing solder resist (SR) and other chemical materials to the electronics industry. This was a bold move because the viability of the electronics field was still unknown.

### 1988

### Start of local production overseas

We established Taiyo Ink Mfg. Co., (Korea) Ltd. and began local production to meet rapidly growing sales volume in South Korea. We expanded our local production activities to the United States in 1995, Taiwan in 1998, and China in 2003, creating a global supply structure based on local production and sales.



# For 2030

# Contributing to "a cheerful society" through the medical and pharmaceutical, food, and energy fields

### 2014

# Establishment of a solar power generation subsidiary

We established the renewable energy company Taiyo Green Energy Co., Ltd., and commenced operations of a floating solar power plant in October 2015 following Japan's adoption of a comprehensive feed-in

tariff program for renewable energy. As of November 2021, Taiyo Green Energy is operating 13 floating solar power plants nationwide.



### 2015

### Launch of the food business

Starting with baby leaf greens in a fully enclosed plant factory in November 2015, we are now use various methods to cultivate a variety of crops, including ICT to grow high-quality strawberries and hydroponics to grow melons. We are also pursuing the cultivation of highly nutritious insects as a solution for food shortages, and began farming crickets in 2018.

### 2017

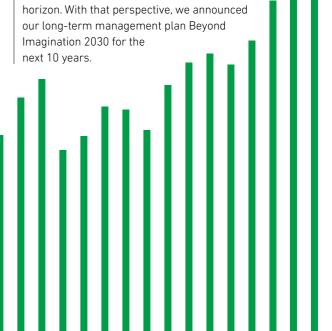
# Establishment of a pharmaceutical business subsidiary

We launched the Medical and Pharmaceutical Business in 2017 with the establishment of subsidiary Taiyo Pharma Co., Ltd. to manufacture and sell long-listed products that medical professionals and patients have trusted for many years. The addition in 2019 of Taiyo Pharma Tech Co., Ltd. to provide efficient and reliable contract manufacturing of high-quality pharmaceuticals fully established the Medical and Pharmaceutical Business as the Group's second core business.

### 2021

# Announcement of the long-term management plan

We believe that, amid the immense changes in the business environment from the pandemic, climate change, and rapid technological advances, it is important to look beyond the short-term changes to the longer-term horizon. With that perspective, we announced our long-term management plan Beyond Imagination 2030 for the next 10 years.



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# The Taiyo Group in Numbers

Results on a consolidated basis as of March 31, 2021

In addition to maintaining the top spot worldwide in the solder resist (SR) market, the Taiyo Group is launching new businesses in the medical and pharmaceutical domain as a second growth pillar, as well as in the food and energy domains.

We are building on our steady management base to create new business and achieve continuous growth.

### **Net sales**

¥80.9 billion

We have established a revenue base that enables continuous growth, as exemplified by our increased revenue for the past four years straight.



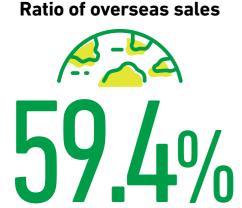
### **Operating margin**

17.2%

We outperformed the manufacturing sector's average operating margin of 3.6%\* by a wide margin.

\* Source: 2020 Basic Survey of Japanese Business Structure and Activities (FY2019 results)





Beginning with the launch of on-site production in South Korea in 1988, we have expanded our business globally and acquired our own overseas production expertise.

### Return on equity

13.1%



An ROE of 10% or higher indicates that equity is being used efficiently and generating a high rate of return. In our Beyond Imagination 2030 long-term management plan, we have set a target ROE of 18% or higher.

### **Dividend on equity**

6.3%

This index indicates how much a company returns to shareholders in the form of dividends. Our long-term management plan sets a target of maintaining dividends of 5% or higher.

### Solder resist global market share

**No.** 1



We are responsible for 57%\* of the SR market worldwide.

\* Source: Electronics Mounting New Material Handbook 2019 by Fuii Chimera Research Institute, Inc.

### **Group employees**

2,067



We have 1,175 employees in Japan, meaning more than 40% of our employees are based at our overseas locations.

### **Corporate history**

68 years

Founded in 1953 amid the post-war economic recovery, we have enjoyed continued growth and are now launching new endeavors under our long-term management plan.



### Renewable energy ratio



100%

Thanks to our 13 floating solar power facilities (which produce an estimated 22 GWh in a year), we generate more renewable energy than what the Group's Electronic Materials Business in Japan consumes.

# Ratio of female employees

31%

The Group as a whole employs 1,533 men and 704 women (including temporary workers).



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We are accelerating our evolution as a global company by developing self-sufficient personnel and a solid foundation for sustainable growth.

### **Management Plan for the Next Decade**

### Setting the course for sustaining growth even through uncertain times

During the previous three-year medium-term management plan NEXT STAGE 2020 to fiscal 2020, Taiyo Holdings made substantial progress developing the Medical and Pharmaceutical Business and establishing it as a second business pillar in our drive to fulfill our basic strategy to become a comprehensive chemical company. Under the plan, we achieved and maintained our quantitative target for a dividend on equity (DOE) of 5% or higher and attained record-high operating income. We reached our target for an operating margin of 20% or higher in the Electronic Materials Business but the overall operating margin was below the target as we fulfilled the basic strategy by conducting large-scale M&A to establish the Medical and Pharmaceutical Business. We also reached our target for return on equity (ROE) of 11% or higher in fiscal 2021, although it was a year later than planned.

Based on the progress with the previous plan, in June 2021, we announced the Beyond Imagination 2030 long-term management plan. The reason we adopted a 10-year plan instead of the usual medium-term plan is because we believe it is

important for our management strategy to focus on the long-term perspective so that we remain consistent through tumultuous changes in the business environment from the pandemic, climate change, and rapid technological advances.

In addition, our core solder resist (SR) products have an overseas sales ratio exceeding 90% and a global market share near 60%, which means external factors, such as exchange rate fluctuations and semiconductor industry cycle, affect our business performance. Also, our new products often require five to 10 years to progress from development to customer adoption and mass production. The Medical and Pharmaceutical Business, which is now our second business pillar, is also facing major changes that will play out over the long term, such as Japan's aging population and declining birthrate and government policy concerning the health care system.

A management plan with primary strategies formulated from a long-term perspective will enable us to establish sustaining business growth and enhance corporate value through the medium and long term.

### Message from the CEO

### **Overview of Beyond Imagination 2030**

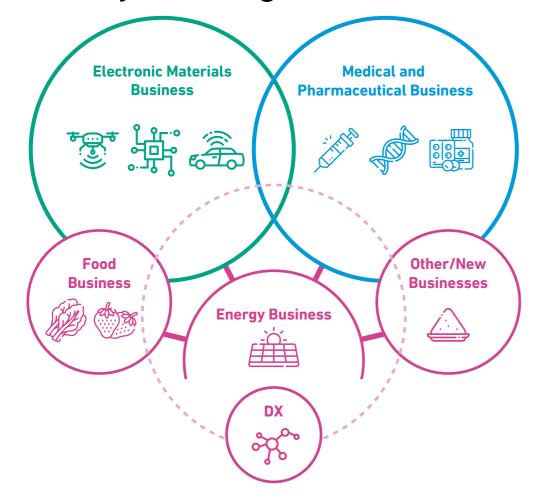
### A cheerful society and a future beyond imagination

The world is entering an era of uncertainty, rapid change, complexity, and ambiguity. Even in this unpredictable business environment, our goals are unchanged. Our management philosophy is to realize "a cheerful society," and we continue to direct our business activities for that ultimate objective, which is embodied in our Beyond Imagination 2030 long-term management plan.

With the advances in technology, heightened concern about the global environment, and the

stepped up efforts of governments, companies, and people to address social issues, the future in 2030 will certainly be very different than anything we have imagined. The Taiyo Group's ambition is to realize "a cheerful society" and a world that is "beyond imagination" by creating a wide range of innovative products to fulfill the dreams of the world. To accomplish our management philosophy, the long-term management plan set the seven basic strategies on the right to follow.

# Long-Term Management Plan **Beyond Imagination 2030**



### Basic Develop and activate self-sufficient personnel who are capable of acting **Strategies** independently, and who respond to diversifying organizations and society Achieve continuous growth and explore new business areas in the Electronic Materials Business Grow the Medical and Pharmaceutical Business further Advance and evolve through digital transformation Create new businesses Execute strategic M&A Strengthen efforts toward the Sustainable Development Goals (SDGs)

### **Develop and Activate Self-Sufficient Personnel**



Develop personnel who proactively create added value that can contribute to the Taiyo Group and society

Developing and activating self-sufficient personnel was presented as the last of the nine basic strategies in the previous medium-term management plan. In the new long-term plan, however, we list it first in the new basic strategies, which are the foundation of all Group activities, because investing in human resources is our highest management priority when considering our long-term objectives.

A proactive workforce is particularly important now when the industry power landscape is changing ever faster from the speed of technological innovation and changes in society. Our core Electronic Materials and Medical and Pharmaceutical businesses could also potentially encounter game-changing innovative technologies and products or unexpected events, like the pandemic, that can alter their business environments. An operation with a top-down business structure will not function well in such a rapidly changing market; for us to continue growing we must have self-sufficient personnel with each individual thinking and acting on their

By "self-sufficient," we mean individuals that

set their own objectives and enjoy the process of achieving their goals. Of course, fulfilling one's duties in the organization is fundamental, but self-sufficient means more than that. It means being able to help improve business functions even outside one's own duties by identifying a business problem and devising a way to increase productivity, or creating a new business. A self-sufficient employee is a person who creates added value that benefits their company and society.

We have long recognized the importance of self-sufficient personnel and have been focusing not just on hiring and training individuals to be proactive in their work, but also creating an environment where employees will be highly motivated to fulfill their potential. In 2014, we began focusing particularly on establishing a healthy balance of work motivation, fair evaluations and compensation, and the workplace environment.

We motivate our employees by providing opportunities to gain experiences that will help them in their careers, including assigning young employees to lead internal project teams and

### Message from the CEO

appointing experienced personnel to managerial positions at Group companies. To provide fair evaluations and compensation, we recently introduced a new personnel system that provides a more objective evaluation of an employee's contributions and substantially increased our salary structure. To round out the balance, we improved the workplace environment by creating conditions where employees can concentrate on their work and be supported by a generous welfare system. Measures in this area included introducing the latest machinery and equipment to stimulate the environment of experimentation and research, designing a high-quality cafeteria in every aspect from food ingredients to interior design, and constructing an on-site daycare center so new parents can feel comfortable about returning to work with their new family member nearby.

The Taiyo Group provides an environment where every employee can pursue their full potential, and this will be the strength that enables us to continue evolving into an organization with abundant self-sufficient personnel creating new value.



### The Taiyo Holdings of 2030

### Sustaining growth in the two core businesses, growing the Energy Business, and integrating **DX** across the Group

Our self-sufficient personnel will be the driving force as we advance toward our 2030 objectives by expanding our core Electronic Materials and Medical and Pharmaceutical businesses, growing the Energy Business and integrating digital transformation (DX) across the Group. We will also continue building the Food Business and pursuing new business creation.

We will expand the Electronic Materials Business by strengthening the current SR business, accelerating the flow of new product introductions, and developing new applications for existing technologies. These three initiatives will drive further expansion of our SR market share and the development of other electronic materials into a second core revenue source alongside SR.

The Medical and Pharmaceutical Business is focusing on maintaining and steadily growing its therapeutic pharmaceuticals manufacturing and sales business. The business is also strengthening its domestic plants and constructing a global

production system to provide high-quality therapeutic pharmaceuticals worldwide as a contract manufacturing organization (CMO). The business is also taking steps to elevate from a CMO to a contract development and manufacturing organization (CDMO) as it actively pursues global expansion of its CDMO business in the regenerative therapy and gene therapy sectors.

The Energy Business is aggressively developing its floating solar power plants, which generate renewable energy covering 100% of the power used by the Electronic Materials Business in Japan. The business is now seeking to provide renewable energy for all of the electricity used by our current operations worldwide. The Food Business is boosting the safe and stable production and deliveries of leafy vegetables in its plant factories. Anticipating potential food shortages in the future, the business is also conducting research, development, and commercialization of food sources, including the

commercialization of farmed crickets for food products and animal feed and factory production of high value-added ingredients.

We are also aggressively integrating DX into all of our businesses with the assistance of companies including subsidiary and ICT service provider funlead corp. DX will raise the productivity and sophistication in all Group operations. At the same time, we will reshape our business model with new businesses created by commercializing new technologies and system tools we develop

while converting our plants into smart factories.

Aggressive M&A will be a key part of our business development. Rather than to expand our business scale, however, M&A will solely be used to advance our business strategy. We will prepare by identifying the technology, personnel, sales channels, and other elements we will need to execute our strategies from a long-term and global perspective so that we will be able to promptly decide and execute M&A at the most opportune time.

### **SDG and ESG Management Initiatives**



### Carbon neutral, community contribution, and numerous other initiatives for a sustainable society

We have persevered and grown our business since our founding in 1953 by continually earning the trust of our shareholders, customers, business partners, local communities, and many other stakeholders. The effort we have taken to earn and maintain that trust will now help us achieve the Sustainable Development Goals (SDGs) and have set strengthening our SDG efforts as a basic strategy in our Beyond Imagination 2030

long-term management plan.

Our management philosophy "To achieve 'a cheerful society' by further advancing every technology in our Group and by creating a wide range of innovative products to fulfill the dreams of the world" directly relates to Goal 9 to "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation." Our high-quality SR has contributed to



### Message from the CEO

numerous technological innovations throughout the electronics industry from smartphones to electric vehicles. We will continue creating foundations for industry and technological innovation through our Electronic Materials. Medical and Pharmaceutical, and other businesses.

We are also actively using our business to promote initiatives for Goal 7 "Affordable and clean energy" and Goal 8 "Decent work and economic growth" toward the realization of a sustainable society. Energy is a critical area requiring action, and society is certain to increasingly demand that businesses meet their electricity needs by using renewable energy as much as possible.

After the 2011 Tohoku Earthquake and Tsunami, we recognized both the importance and business potential related to environmental and energy issues, and in 2015 we launched our renewable power generation business. Starting with two floating solar power plants near our main plant in Ranzan, Saitama Prefecture, the Energy Business has grown to operate 13 such plants across Japan generating some 20 GWh of electricity annually, enough to power 7,400 homes. As mentioned above, we are already generating more electricity from renewable energy than the Electronic Materials Business consumes in Japan, and we are aiming to power all of our current operations worldwide by 2030.



We consider the environment and society in all of our business activities from various perspectives. All officers and employees comply with laws and regulations, are fully committed to ethical values related to protecting the environment and quality control, and always seek to contribute to realizing a sustainable society in the future. One of our environmental management initiatives has been to reduce the amount of packaging material waste from core products in the Electronic Materials Business, and we have successfully reduced waste to 2% of previous levels in Japan, Taiwan, and China. For our core SR products, in addition to our ongoing efforts to improve their environmental performance, such as by eliminating halogen content, we plan to introduce material recovery and recycling technologies. These are major challenges, but we believe that breakthroughs in areas like these will advance us toward the "cheerful society" of our management philosophy and the "future beyond imagination" of our long-term management plan.

We also understand that companies serve society and are members of their communities. We actively participate in various CSR activities, including joining in local events and volunteer activities, using local ingredients in employee cafeterias, and operating the Kodomo Shokudo cafeteria with a low-priced menu geared to children adjacent to the Musashi-Ranzan train station. During the COVID-19 pandemic, Group company offices in Japan and overseas distributed masks and disinfectant and donated funds to local government organizations to help control the spread of the disease. The Ranzan Office provided in-house vaccinations to roughly 1,000 employees and members of community groups.

In addition, our employees are important stakeholders, and we take steps to provide a workplace that is comfortable and rewarding. We are also actively promoting diversity and gender equality in the workplace, including taking the progressive step in 2017 to introduce gender-neutral restrooms.

We intend to accelerate activities that contribute to the sustainability of society and aim to be a Group that is trusted by all stakeholders.

### **Management Targets for 2030**

### Improve capital efficiency to 18% ROE and enhance shareholder returns to maintain 5% DOE

The Beyond Imagination 2030 long-term management plan aims not just to expand our business scale, but also to maximize our corporate and shareholder value while firmly fulfilling our corporate responsibility to society. We plan to achieve that by increasing profits over the long term, which will enable us to improve our capital efficiency and return ample profits to shareholders. In line with these objectives, we have set management targets for 2030 of achieving ROE of 18% or higher and maintaining DOE at 5% or higher.

ROE shows the rate of profit generated with funds received from shareholders and is widely considered an indicator of an organization's capital efficiency. Our target for ROE of 18% is ambitious when compared to the target of 11% or higher in the previous medium-term management plan and the 13.1% for fiscal 2021, but I believe we can reach it by continuing to improve our profitability and properly managing our capital.

We will continue to use DOE as an indicator for shareholder returns and firmly hold it at 5% or higher. Many companies use the dividend payout ratio as an indicator for shareholder returns; however, we believe that it does not necessarily present an adequate snapshot of the status of shareholder returns because earnings per share, which is used as the denominator in the formula, can fluctuate widely depending on the level of profit in a particular year. For our dividend policy, we have consistently used DOE as an indicator showing the level of dividend payment to be

provided for shareholder return. Because it uses shareholders' equity as the denominator, DOE allows us to ensure stable dividend distribution regardless of the semiconductor industry cycle or other short-term fluctuations in business performance.

The outlook for business conditions remains highly unpredictable. Although vaccinations are helping reduce the number of COVID-19 infections in some areas, there is still no end in sight for the pandemic. Even if the pandemic subsides, there are growing concerns about the global economy, such as the potential for soaring raw material and fuel prices as economic activity picks up again and a slowing of the Chinese economy.

In these highly volatile conditions, we will conduct comprehensive risk management to be prepared for any situation that could develop at any time so we can effectively respond to changing conditions. To execute our long-term management plan, we will develop self-sufficient personnel capable of initiating action in response to any changes and steadily implement measures to address various issues. With this determination, we will achieve sustaining growth and continue raising our corporate value into the medium and

We will continue striving to fulfill our management philosophy of "a cheerful society" and our long-term management plan for a "future beyond imagination" in 2030. We look forward to the continued understanding and support of our stakeholders.

ROE 18% DOE 5% or higher

Reference	2025		2030	
Medical and Pharmaceutical Business	Net sales Operating margin	¥30 billion 15 %	Net sales Operating margin	¥60 billion 15 %

Electronic Materials Business earnings are influenced by the semiconductor industry cycle, which encompasses market fluctuations for semiconductors, electronic components, and other devices.

These conditions lead to wide fluctuations in business performance that make it difficult to make reasonably accurate earnings forecasts. For that reason, we will not disclose 2030 performance targets for the Electronic Materials Business

Strengthening **Non-Financial Capital** 

**Management Philosophy** 

To achieve "a cheerful society" by further advancing every technology in our Group and by creating a wide range of innovative products to fulfill the dreams of the world.

**Human Capital** > See P. 49

**Natural Capital** > See P. 51

**Manufactured Capital** > See P. 53

**Intellectual Capital** > See P. 54

Management

**Foundation** 

**Business Model** 

**Medical and Electronic Materials Pharmaceutical Business Business** > See P. 21

> See P. 27

Other/New **Food Business** Businesses > See P. 33 See P. 33

**Energy Business** > See P. 33

**Implementing ESG Management** 

> See P. 41

Corporate **Community and** governance society engagement

> See P. 48

management > See P. 51

**Environmental** 

Mega Trends and

**Social Risks** 

Climate change and

resource shortages

Changing

population dynamics

**Evolution of** technologies

Uncertain world

**Value Created** 

**Self-sufficient** personnel capable of acting independently

**Technological** innovation through product development

> High-quality pharmaceuticals

Use of renewable energy

DX and smart factories **Management Targets** for 2030

ROE 18%

DOE 5%

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

**Resolving Social Issues** through Business

> See P. 37













# **Overview of Operations**

# Strengthening our world-leading technologies and know-how and applying these to our diverse operations

### **Fiscal 2021 Business Summary**

Fiscal 2021, ended March 31, 2021, saw the global economy continue to face rising uncertainty due to the protracted U.S.-China trade friction as well as the COVID-19 pandemic that broke out around January 2020, resulting in a challenging operating environment as in fiscal 2020.

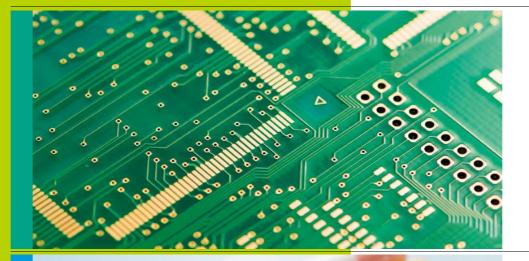
Given this situation, although there was an impact from weaker automobile sales, the Electronic Materials Business performed well thanks to recovering demand for automotive-related parts and materials mainly in China as well as growth in the semiconductor market from the launch of 5G and the expansion of telecommuting worldwide. The Medical and Pharmaceutical Business generally posted steady results, despite impacts on product sales and contract manufacturing due to access restrictions placed on medical institutions and other factors.

As a result, net sales, operating income, ordinary income, and profit attributable to owners of parent were up over the previous fiscal year, providing an impetus toward a new stage in our growth.

### **Net Sales/Operating Income**

Net sales Operating income (Millions of yen) 90,000 -





### **Electronic Materials Business**

The Electronic Materials Business is mainly involved in the manufacturing and sales of chemical products used in electronic components for the electronics industry. Parts and materials for printed wiring boards (PWBs) are used by the PWB internal production departments of electronics manufacturers and dedicated PWB manufacturers. These parts are critical components found in personal computers, smartphones, tablet devices, and numerous other ICT devices as well as digital appliances and automotive-related products such as electric control units (ECUs). We are working to upgrade and diversify our long-standing fundamental technology toward developing new product fields.

### **Medical and Pharmaceutical Business**

The Group established Taiyo Pharma Co., Ltd., which engages in the manufacture and marketing of pharmaceuticals, with the goal of developing a secondary earnings base following the Electronic Materials Business. This marked our full-scale inroads into the pharmaceuticals business. Taiyo Pharma continues to ensure the stable supply of proven drugs that have long been used and are critical to society. In 2019, Taiyo Pharma Tech Co., Ltd. launched business as a contract pharmaceutical manufacturer. Taiyo Pharma Tech applies advanced good manufacturing practices (GMP) toward the stable provision of high-quality pharmaceuticals while responding to the needs of our various clients as a truly competitive manufacturing plant.



### Other Businesses

The Group is working to create new businesses in a broad range of fields. For example, in energy, we are promoting the spread of eco-friendly renewable energy, which includes building floating solar power plants. We are also promoting the food business, where we operate in-house plant factories and breed insects for animal feed and human consumption. In addition to these, we are pursuing opportunities in such fields as the fine chemicals business, which involves contract development of synthetic materials, and the ICT business, which supports the Group and our customers in digitalization.

>>> See P. 33



### **Electronic Materials Business**



Since successfully developing and commercializing resist ink in 1970, the Group has helped to develop the electronics industry through the supply of high-quality components and materials for electronics. We have grown our worldwide market share of solder resists (SRs) to around 60%\* and overseas sales account for some 90% of our total SR sales, having obtained certification of our materials from major clients around the world after building and expanding local production and sales networks mainly in Asia ahead of competitors. As a leader in SRs, we will continue to supply a diverse array of electronic materials, harnessing our strengths in advanced R&D and production technologies.

\* Source: Electronics Mounting New Material Handbook 2019 by Fuii Chimera Research Institute. Inc.

### **About Solder Resists**

A solder resist (SR) is an ink that serves as an insulation film covering the surface of a printed wiring board (PWB) to protect the circuit pattern of the board. As the word "resist" indicates, the role of the SR is to prevent solder from adhering to unintended areas when mounting parts. At the same time, SR serves as a permanent protective layer that protects and insulates the circuit pattern from dust, heat, and humidity.



### **Fiscal 2021 Business Summary**

### Net sales (Millions of yen) 60,000 -53,096 48.086 45.000 -30,000 -15,000 -FY2018 FY2019 FY2020 FY2021





Note: Goodwill amortization previously included in company-wide expenses under matters concerning difference adjustments has been allocated to the respective reporting segments from fiscal 2020. Furthermore, personnel expenses and testing and research expenses previously included in company-wide expenses under matters concerning difference adjustments have been allocated to the respective reporting segments from fiscal 2021.

Fiscal 2021 sales volume of rigid board materials in the Electronic Materials Business was steady on the recovery in demand for automotive-related parts and materials mainly in the China market in the third and fourth quarters, despite the slowdown in automobile sales caused by the COVID-19 pandemic. In addition, sales volume increased year over year on strong sales of materials for consumer electronics along with materials for servers and smartphones.

Sales volume of materials for semiconductor package boards exceeded the previous year's total due to growth in the semiconductor market underpinned by rising demand for servers, data centers, personal computers, and tablet devices attributed to the launch of 5G and the worldwide increase in new working styles, including telecommuting.

As a result, net sales rose by 8.6% year on year to 53,096 million yen, and segment profit jumped 20.3% to 11,208 million yen.

### **Business Opportunities / Risks and Strengths**

### Opportunities

- △ Growth of 5G-related demand
- A Rising demand for semiconductor devices due to increased sales volume of personal computers and tablet devices and rising demand for servers
- △ Growth of new products in the display-related market

### Risks

- ▼ Tougher competition with local manufacturers in China
- ▼ Spread of electronics without PWBs due to development of innovative new technologies
- ▼ Soaring raw materials and transport costs attributed to oil prices and container shortages

### Strengths

Strong market share and global network

Advanced R&D, manufacturing technology, and intellectual property strategy

Broad product lineup

and strong client base



### **Achieve Continuous Growth and Explore New Business Areas in the Electronic Materials Business**

### Strengthening Collaboration with the Supply Chain and Focusing on Product Development Ahead of Market Needs and Stable Supply

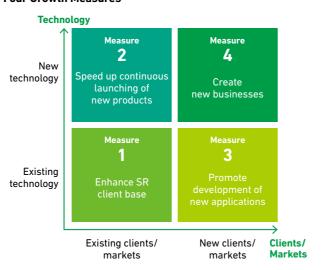
With the digitalization of society accelerating, global ICT platform companies such as Google, Apple, Facebook, and Amazon (GAFA), who are major users of semiconductors, have begun actively developing their own semiconductor chips in order to improve the functions of their products and services. However, while they plan and develop semiconductors, these ICT platform companies typically do not produce them in-house. For this reason, the presence of semiconductor manufacturers has grown in the supply chain amid the concentration of manufacturing arrangements for proprietary chips with these semiconductor manufacturers.

We have strengthened collaboration with the supply chain, including not only substrate manufacturers who are our direct clients but also semiconductor manufacturers and end product manufacturers from an early stage. In this manner, we have built an extensive track record and strong relationships of trust, which includes receiving certification for our materials from a number of companies. Commanding our strengths in product development ahead of market needs and stable worldwide supply system, we have contributed to the development of the electronics industry through the

supply of high-quality products such as SRs for which we have captured a nearly 60% share of the worldwide market.

We will continuously strengthen existing business and actively promote new product development, new applications, and new business development in peripheral fields in an effort to grow the Electronic Materials Business over the medium to long term.

### Four Growth Measures



Measure 1 Existing Clients + Existing Technology

### Utilize Strong Relationships of Trust with Clients to Maintain and **Acquire Materials Certifications**

Today, the Electronic Materials Business centers on chemical products for electronic components such as SRs used in PWBs. Our offerings are largely categorized into rigid regular SR, rigid high-end SR, SR for semiconductor packages (PKG), SR for flexible printed circuits (FPCs), and build-up materials. Rigid high-end SRs for semiconductor PKG and automotive substrates are especially expected to see high growth in the future.

In the semiconductor PKG field, we have established a track record of supplying major semiconductor manufacturers and foundries. In recent years, we have gained a reputation for supplying materials used in the products of global ICT platform companies, resulting in our dry film-type SRs being adopted for use in these companies' proprietary chips manufactured by semiconductor manufacturers. We will utilize this track record and client relationships to maintain and acquire materials certifications from clients.

In addition, following the electrification of automobiles, worldwide sales volume of automotive substrates is expected to double over the decade from 2020 to 2030. Our highly

reliable SRs have been adopted in a number of automotive substrates used in electric vehicles (EVs), hybrid EVs (HEVs), and plug-in hybrid EVs (PHEVs). We maintain a high market share, having established a track record of supplying Tier 1 suppliers around the world, including Japanese and European companies. We will further acquire our materials certifications from European Tier 1 suppliers and European substrate manufacturers, which excel in driving support systems and other domains, thereby further growing the business globally.

Demand for SRs for general PWBs also continues to grow mainly in China, and we will seek to increase our market share by providing localized products that address the diverse needs of clients.

In this manner, we will harness our strong client base built up over many years to develop and supply next-generation products tailored to client needs. Additionally, to further strengthen our business foundation, we will expand our global production system mainly in Asia and upgrade our business continuity plan (BCP).

### **New and Noteworthy**

### Expanding Our Global Production System and Upgrading Our BCP to Address Growing Worldwide Demand

The Group is working to further strengthen its global production system mainly in the high growth markets of Asia in order to address growing demand for electronics products around the world.

In June 2020, we established Taiyo Ink Vietnam Co., Ltd. in Vietnam's capital of Hanoi to make inroads into the promising Vietnam market. The company began manufacturing high-end SRs for rigid boards in July 2021 The operation of this new plant will enable us to shorten delivery lead time in ASEAN in the future. We also relocated and revamped plants in China and Taiwan to boost production capacity locally and improve client access.



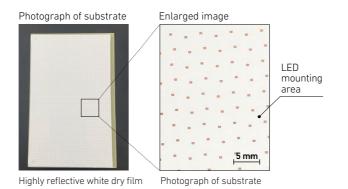


Measure 2 Existing Clients + New Technology

### Tapping into the Logic IC Market and Speeding Up Development and Launch of New Products Targeting Existing Clients

Semiconductor ICs are categorized into memory IC for DRAM and flash media and logic IC for central processing units (CPUs). We dominate the market for SRs for PKG substrates used in memory IC, but we have yet to capture a sufficient share of the logic IC market. Therefore, tapping into the logic IC market while maintaining our market share in the memory IC forms a major pillar of our future growth strategy. Logic IC has predominantly used liquid-type SRs, but recently there has been a shift to dry film-type SRs, an area where we excel, mainly due to the ease of film thickness control. Recognizing these market changes as a major opportunity, we are working hard to capture market share in logic IC. Furthermore, we developed a highly reflective white dry film capable of mounting more than 10,000 mini LED on a panel-size substrate. This film has been adopted for the back light units in products of global ICT platform companies. We are also accelerating the launch of new products targeting clients' needs for more compact and thinner devices, higher

performance, and high-speed transmissions. These new products include photoimageable coverlay films for FPCs that balance both high resolution and high flexibility as well as new seed polyimide films for high-speed transmission FPC substrates.



Measure 3 New Clients + Existing Technology

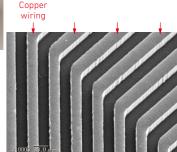
### Utilizing Technologies and Know-how from SRs to Expand Applications into New Markets Such as Electronic Components

Commanding our technologies and know-how from SRs, we are now looking beyond electronic circuit substrate materials to expand business into new markets such as electronic parts. One example is expanding usage of dry film-type SRs to high-frequency inductors. Layering dry film-type SRs reduces size compared to existing ceramic inductors. With the number of inductors per smartphone growing amid the increase in telecommunications bandwidth, we anticipate the increased use of these SRs in the future. In addition, we co-developed with DIC Corporation a new seed film for fabricating wiring on high-frequency PWBs. This is a film coated on both sides with new seed layers comprised of metallic nanoparticles. This film makes it possible to fabricate wiring that transmits high-frequency signals without loss in the high-frequency spectrum of 5G.

We will continue to actively explore new applications for our SR technologies in semiconductor processes.



New seed film for fabricating wiring on high-frequency PWBs



this new product

Thickness of copper wiring: 8 µm Diagonal wiring L/S: 10/10 Vertical wiring L/S: 8/8 (um)

### **New and Noteworthy**

### Received the 17th JPCA Award for Its Thermal Curable Film Using New Resin for High-Frequency Application Compatible with High-Speed Communications

The spread of 5G networks requires new films for electronic circuit substrates that reduce signal loss in milliwaves. To capture these needs, we developed a high-frequency thermosetting film offering excellent electrical characteristics, workability, and reliability by using novel resins with modified polyphenylene ether (PPE). This film offers the same workability and reliability of existing thermosetting substrate films, while delivering superior electrical characteristics—a strength of thermoplastic PPE films—making it ideal for 5G electronic circuit substrates and interlayer insulation materials. This film won the 17th JPCA Award organized by the Japan Electronics Packaging and Circuits

Association in October 2021 after being highly lauded for these characteristics.



Measure 4 New Clients + New Technology

### Developing New Businesses of the Future with Strategic Partnerships and Open Innovation

We are working to develop new businesses of the future while closely monitoring technological developments in electronics and market trends. One is the display domain. In the field of flat panel displays (FPDs), attention is focusing on micro LED, which uses LEDs to display images in the three colors of red, green, and blue. This is recognized as a new display technology following in the footsteps of LCD, organic electroluminescence, and mini LED. We will further expand our presence in the display business by developing new products compatible with the mounting of even smaller micro LED. As part of this new business development, we intend to actively promote strategic partnerships and open innovation with other companies and research institutes to complement our proprietary resources.

To promote these growth strategies, we will step up development of self-sufficient personnel capable of acting independently who will become key drivers in our business activities. At the same time, we will focus on intellectual property strategy underpinning manufacturing and technological innovations. Our intellectual property department is now conducting research, and we are moving ahead with effective technological development based on the latest technology trends and steadily accumulating intellectual properties by applying for patents strategically. Underpinned by this talent and intellectual properties, we will implement the above four measures, thereby continuously growing our Electronic Materials Business.

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### Medical and **Pharmaceutical Business**



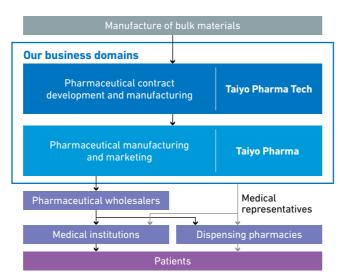
The Group established Taiyo Pharma Co., Ltd., which manufactures and markets pharmaceuticals, in August 2017 with the goal of developing a secondary earnings base following the Electronic Materials Business. In October 2019, we launched contract development and manufacturing organization (CDMO) services at Taiyo Pharma Tech Co., Ltd. after acquiring a plant from Daiichi Sankyo Company, Limited.

Today, we manufacture and market 18 long-listed products\* and engage in the CDMO business using advanced technologies. We are strengthening the foundation of this business with the goal of reaching 30 billion yen in net sales by 2025 and 60 billion yen in net sales and an operating margin of 15% by 2030.

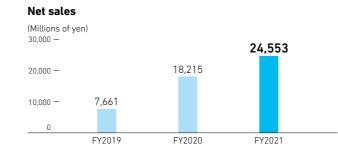
\* A brand-name drug whose patent period or reexamination period has expired, enabling the sale of generic versions

### **Business Domains and Functions**

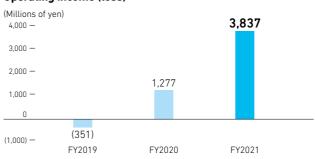
The Group engages in the manufacture and marketing of pharmaceuticals and CDMO services. Taiyo Pharma manufactures and markets long-listed products with an established track record among medical professionals and patients, while Taiyo Pharma Tech provides CDMO services for high-quality ethical drugs based on market needs.



### **Fiscal 2021 Business Summary**



### Operating income (loss)



Note: Personnel expenses and testing and research expenses previously included in company-wide expenses under matters concerning difference adjustments have been allocated to the respective reporting segments from fiscal 2021. Furthermore, segment profit for fiscal 2020 is presented based on the calculation method for profits and/or loss of the revised reporting segment.

In fiscal 2021, sales of Taiyo Pharma's 14 long-listed products trended according to plan, despite some products experiencing a drop in sales due to a reduced patient base from restricted access to medical institutions and changes in consultation behavior because of the COVID-19 pandemic. Additionally, sales of the four new long-listed products acquired from AstraZeneca K.K. in April 2020 trended as expected. As for the CDMO business of Taiyo Pharma Tech, which was acquired from Daiichi Sankyo in October 2019, sales also trended according to plan, despite decreased sales volume of CDMO services for some products due to the COVID-19 pandemic.

As a result, net sales increased by 34.8% year on year to 24,553 million yen, and segment profit jumped 200.5% to 3,837 million yen.

### **Business Opportunities / Risks and Strengths**

### Opportunities

- ▲ Changes in industrial structure
- ▲ Growth of regenerative therapy and gene therapy markets
- ▲ Creation of novel drug market through technological innovation and partnerships between industry, government, and academic institutions

### Risks

- ▼ Price controls on brand-name drugs and promotion of generics
- ▼ Declining future predictability due to medical system

### Strengths

**High-quality manufacturing** technology and stable supply system

Global network and operational know-how of overseas plants

Long-term, high reliability





### Grow the Medical and **Pharmaceutical Business Further**

### Introduction

The Group's Medical and Pharmaceutical Business is the responsibility of Taiyo Pharma, which manufactures and markets pharmaceuticals, and Taiyo Pharma Tech, which provides CDMO services for pharmaceuticals. One of the basic strategies of our Beyond Imagination 2030 long-term management plan states "grow the Medical and Pharmaceutical Business further." We are now proactively committing management resources to establish this business as the second pillar of our business portfolio after the Electronic Materials Business. The heads of both companies sat down to discuss the future growth strategy and vision of the Group's Medical and Pharmaceutical Business.

### Theme 1

### **Current Situation of** the Pharmaceutical Industry

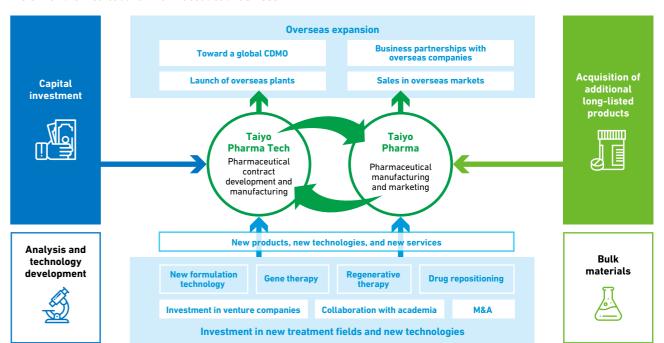
Arima: The pharmaceutical industry has been plagued by a number of issues in recent years, including quality problems and manufacturing deficiencies involving generics. This has

resulted in delays in the supply of some drugs, shaking the industry's trust. These problems with generics will undoubtedly lead to stricter demands for the quality of ethical drugs in the future.

Ominato: Increasing quality in the manufacturing process of pharmaceuticals inevitably results in higher costs. At the same time, the ongoing policies to control drug prices have contributed to stronger cost demands from pharmaceutical companies. Going forward, contract manufacturing organizations (CMO) and CDMOs will need to produce even higher-quality pharmaceuticals, while controlling manufacturing costs, and supply these to markets in a stable manner. Companies unable to meet these demands will be weeded out. Arima: Balancing high quality and cost is certainly a key to success no matter the industry. For example, in its Electronic Materials Business, the Group has established a solid position as a leader among global competition in terms of not only the function and quality of products but also cost and supply system. In the Medical and Pharmaceutical Business, we should be able to build a unique position in the industry by responding to the needs of patients and clients to further build our track record.

Ominato: You're right. These more rigorous demands from the market caused by quality issues represent an excellent

### Vision for the Medical and Pharmaceutical Business



opportunity for the Group. The Takatsuki Plant has been in operation for more than 80 years as a mainstay plant of Daiichi Sankyo. Under its advanced good manufacturing practices (GMP) management structure, the plant has the facilities for the stable supply of high-quality ethical drugs and a team of professionals with a wealth of experience and knowledge in

pharmaceutical manufacturing. Taiyo Pharma Tech has grown thanks to its technologies. Put another way, this means that the company has the ability to supply high-quality pharmaceuticals that meet the needs of the market in a stable manner. By refining its technologies, the company should be able to further increase its value and presence in the industry.



Executive Managing Officer, Taiyo Holdings Co., Ltd. Representative Director and COO, Taiyo Pharma Co., Ltd.

Joined Taiyo Ink Mfg. Co., Ltd. in 1993. He became General Manager of the Sales Division in 2014. After serving as General Manager of the Research Division for Taiyo Holdings, he became Manager of the New Business Development Department in 2015 and was appointed Representative Director and COO of Taiyo Pharma in 2017.



### **Suguru Ominato**

Executive Managing Officer, Taiyo Holdings Co., Ltd. Representative Director and Executive Vice President, Taiyo Pharma Tech Co., Ltd.

Joined Taiyo Holdings in 2019. Appointed Director of Taiyo Pharma Tech in 2019 and became Representative Director and Executive Vice President in 2020

### Medical and Pharmaceutical Business | Growth Strategy

Arima: Adding the Group's talent and know-how to the already solid manufacturing foundation is generating a great deal of synergies.

Ominato: The Group already excels in management speed and communication across departments because of its long-standing experience in the electronics industry, which undergoes intense changes. Unlike most major corporations, we have been able to carry out nimble decision-making and cross-functional collaboration. This is a common strength not only of Taiyo Pharma Tech but the entire Group.

### Theme 2

### Measures for Growth

Arima: The Group's strengths apply best to its global expansion. Ethical drugs need to be approved by individual countries, so Japan's pharmaceutical industry mainly focuses on domestic production for domestic consumption. Japanese pharmaceutical companies rarely manufacture ethical drugs outside of Japan.

Ominato: Japan's CMO/CDMO industry also focuses almost exclusively on the Japan market.

Arima: Such a domestic business does not align with our end goal. The electronics business is global and borderless, and the Group has grown the Electronic Materials Business by placing production sites in the most ideal locations around the world. Commanding the Group's know-how in overseas expansion, we will contract manufacture ethical drugs of pharmaceutical companies both inside and outside of Japan and supply these in a stable manner to the people who need them around the world. I believe our goal for the time being is to become this type of pharmaceutical manufacturer, marketer, and CDMO with a footprint in the global medical and pharmaceutical business.

Ominato: I feel exactly the same way. Earlier we spoke about quality and cost. Balancing these two, which are in a trade-off relationship, requires expansion of production scale as well as technical prowess. Specifically, we will need to roll out the



Takatsuki Plant's technology and know-how, facilities, and production environment, while further improving technical prowess and production capacity.

Arima: Transplanting the Takatsuki Plant's technology and know-how will enable us to produce high-quality ethical drugs required of the Japan market at overseas locations. First, we will build a global production system enabling us to supply high-quality ethical drugs at reasonable prices to the Japan market. This will be our strength.

Ominato: By expanding our portfolio of production bases globally, not just domestically, we will be able to continue to supply ethical drugs even if some of our plants cannot operate due to a natural disaster or other contingency. **Arima:** Overseas production is also highly effective in terms of our business continuity plan. Asia represents a promising target as the first area to make inroads. The Group has already established successful production bases in Asian countries in the Electronic Materials Business. The experiences, talent, and knowledge concerning local business and labor practices amassed to date can be used to the advantage of the Medical and Pharmaceutical Business. Ominato: That's right.

### Theme 3

### Technical Themes of Focus

Ominato: The Group does not engage in novel drug discovery, so it will be important to create maximum value by refining our technologies and know-how for the manufacture of ethical drugs.

Arima: Product planning and development are becoming more important. This includes making drugs easier to take by improving dosage form and product packaging. We will step up development in these areas.

Ominato: In the CDMO industry as well, the development part is growing in importance. This involves more than just following drug companies' instructions to the word, it requires proposing process improvements for manufacturing higher-quality products in a stable manner. The Group's strength of analysis and evaluation technologies helps to elevate such development capabilities.

Arima: We're also looking to tackle the challenges of regenerative therapy and gene therapy, two new exciting medical technologies. If these are established, it will pave the way to treatments for diseases and disabilities incurable with

Ominato: However, this is a high-risk, high-return research theme, so research is mainly headed up by academia and venture businesses. Even if they succeed in development in the lab, there are very few CDMOs which can take on the commercial production of these drugs. Therefore, we entered into a capital and business partnership with two

domestic venture businesses in 2019: Cyfuse Biomedical K.K. for regenerative therapy and Gene Therapy Research Institution Co., Ltd. for gene therapy. This marked our entry into manufacturing in the fields of regenerative therapy and

**Arima:** In particular, in the field of gene therapy, nearly all CDMOs are non-Japanese companies. For this reason, our successful commercialization in the future will greatly contribute to the development of Japan's medical technologies. Ominato: The regenerative therapy and gene therapy businesses expect to see strong future growth. Once we enter these businesses and commercialize leading-edge medical technologies, I'm convinced that our technical prowess will be taken to another level.

### Theme 4

### Toward 2030

Arima: Looking ahead, I believe that dramatic forward progress will be made with the Medical and Pharmaceutical Business as the second pillar of the Group's business portfolio. I'm very excited to see the outcomes of our efforts in 2030. Ominato: By 2030, we expect to be operating a number of production bases overseas and expanding our business footprint commanding our development capabilities as a CDMO. Today, however, it feels like an unimaginable future.



We expect to see concrete business results in the fields of regenerative therapy and gene therapy.

Arima: Both globalization and making inroads into regenerative therapy and gene therapy will have their fair share of challenges. Yet, Taiyo Pharma Tech looks completely unfazed.

Ominato: Certainly. We have a bright and positive culture, from young to senior employees, excited about the prospects of overcoming these challenges.

**Arima:** A positive culture that incorporates this challenging spirit and provides a dynamic work environment is a common strength shared by the entire Group. I strongly feel that this is also a major driver behind our business success.

### **New and Noteworthy**

### Completion of Cellular Therapy Product Manufacturing Facility at Taiyo Pharma Tech's Takatsuki Plant

On September 28, 2021, we completed the installation of a cellular therapy product manufacturing facility at Taiyo Pharma Tech's Takatsuki Plant. We will use this facility to engage in the CDMO business for cellular products for regenerative therapy and benefit both the development of Japan's regenerative and cellular therapy technologies and the health of many patients.



### **Other Businesses**

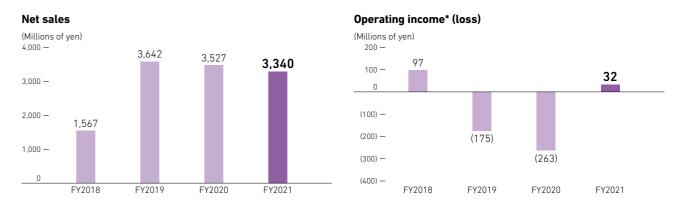


The Group is creating and growing a number of business segments, including energy, food, fine chemicals, and ICT. Among these, in the energy business, we are actively working on expanding eco-friendly renewable energy. Currently, we have 13 floating solar power plants in operation across Japan, which are producing more than enough renewable energy to power the Group's Electronic Materials Business in Japan. We have quickly established a reputation as a supplier that contributes to client companies' participation in RE100.

### What Is RE100?

RE100 is a global initiative run by the Climate Group and CDP, bringing together influential businesses committed to 100% renewable energy. The initiative calls for the spread and promotion of renewable energy by companies to actualize their commitment to 100% renewable energy. The initiative's more than 340 participants include some of the world's most influential companies such as Apple Inc.

### **Fiscal 2021 Business Summary**



Notes: • Inter-segment transactions are eliminated.

• Goodwill amortization previously included in company-wide expenses under matters concerning difference adjustments has been allocated to the respective reporting segments from fiscal 2020. Furthermore, personnel expenses and testing and research expenses previously included in company-wide expenses under matters concerning difference adjustments have been allocated to the respective reporting segments from fiscal 2021.

### **Introduction of Each Business Segment**



We are working to spread and promote eco-friendly renewable energy as a business in order to benefit society by addressing worldwide environmental issues. Since establishing Taiyo Green Energy Co., Ltd. in 2014 to generate natural energy as well as supply and sell electricity, we have been promoting the development of floating solar power plants.

Food Business



We cultivate baby leaf greens at a fully enclosed plant factory as well as produce high-quality strawberries using ICT and melons and other produce compatible with hydroponics. In addition, as one solution to future food issues, we have focused on highly nutritious insects as a food source, which includes researching insect as feed for livestock and aquaculture applications and breeding crickets as a food source.

Fine Chemicals
Business



We excel in the field of contract development of synthesized chemicals, providing high-quality and high-value-added functional materials to global markets. In addition to broadly adopted technologies for dyes, pigments, and pharmaceutical intermediates, we offer a product lineup supporting core components of electronic materials and products widely used from textile dyes to IT electronic materials.

**ICT Business** 



Through the ICT business, we help to renew ICT infrastructure and build new systems for the Group and clients amid the unprecedented changes taking place in industrial structures and business models due to rapid advancements in IoT, big data, and Al. We are also developing new digital services that contribute to sustainable growth.



# **Create New Businesses**

Among our other businesses, we established the energy and food businesses strongly mindful of their contributions to the Sustainable Development Goals (SDGs) and resolving environmental issues. Although the scale and profits of these businesses is small today, they offer strong future growth potential because of synergies with other Group businesses and strong affinity and commonality with our existing know-how.

generating efficiency because the water surface cools solar panels, and bring benefits to local governments and farmers that own water resources. Due to these advantages, we thought they offer greater benefits than conventional onshore solar power plants.

In September 2015, we completed our first floating solar power plant at a reservoir of an industrial park close to Taiyo Ink Mfg.'s head office, with the facility beginning to generate

### Energy Business

### Aiming to Power Our Existing Global Operations with 100% Renewable Energy

Following the 2011 Tohoku Earthquake and Tsunami, the Group's plants were subject to planned power outages due to the electricity shortage. This temporary restriction on plant operations led us to launch the energy business. In December 2014, we established Taiyo Green Energy, and since then we have been promoting the development of floating solar power plants. This is because these power plants require less civil engineering work since they do not use land, offer greater



Floating solar power plant near Taiyo Ink Mfg.'s Saitama Plant

electricity from October the same year. In December 2017, we began operations at a power plant built over an agricultural reservoir near its head office plant. This made it possible for Taiyo Ink Mfg. to produce solder resists for Apple using 100% renewable energy. On April 10, 2018, Apple announced that Taiyo Ink Mfg. had become a new supplier in its Supplier Clean Energy Program. We have constructed a total of 13 floating solar power plants across Japan as of November 2021. This portfolio generates more than 21 GWh of renewable energy, which covers more than 100% of the electricity used by the Group's Electronic Materials Business in Japan (results in fiscal 2021).

Our current target is to expand this portfolio to cover the electricity needs of all existing businesses, including overseas operations, with renewable energy by 2030. Toward this end, Taiyo Green Energy will take the lead in promoting the use of renewable energy, including the establishment of new power plants, and support the utilization of renewable energy of clients and the whole society in addition to the Group.

### Food Business

### Adopting the Group's Unique Approach to **Future Global Expansion**

Food issues caused by rising global populations have become a common worldwide issue. These issues require the urgent establishment of methods for producing and supplying foods in a stable manner. We launched the food business in 2015, hoping to establish sustainable agricultural approaches and methods globally for higher efficiency food production.

Following the test cultivation of baby leaf greens at the fully enclosed plant factory built at Taiyo Holdings' Ranzan Office, we commenced greenhouse cultivation of high-quality strawberries using ICT in September 2018. Globally competitive Japanese varieties of strawberries are in the spotlight internationally. There is particularly strong demand

for sweet strawberries of consistent quality. Not only the products but also Japanese agricultural methods are being exported. We believe that agriculture and farming that does not require vast amounts of land is the key to the future global expansion of the business. Recognizing this, we are promoting the cultivation of other high-value-added produce such as melons.

Our other major food business is insect breeding. The Food and Agriculture Organization of the United Nations (FAO) released a report in 2013 recommending the use of insects as feed for livestock and for human consumption as a solution to food issues. This report brought insects into the spotlight. We have focused on insect breeding using crickets. Today, we are developing products for a number of different uses, including as an ingredient in normal foods and as feed for livestock and pets. The protein contained in 100 g of crickets is roughly three times that of beef, pork, or chicken, and they are rich in vitamins, minerals, and dietary fiber. Furthermore, compared to livestock, insect breeding uses less water and generates fewer greenhouse gases, resulting in smaller environmental impacts. By researching insects for animal feed and human consumption, we aim to find solutions to worldwide food shortages in the future.



Fully enclosed plant factory

# **Fumihiko Kojin** Executive Officer, Taiyo Holdings Co., Ltd. President and Representative Director, Taiyo Green Energy Co., Ltd. Joined Taiyo Holdings in 2011. After serving as Vice President of Taiyo Green Energy, he became President and Representative Director of the company in 2016. 35 TAIYO HOLDINGS Integrated Report 2021

### Feature 1

# **Our Efforts to Achieve**

# SDGS

Since its founding, Taiyo Holdings has collaborated with global society and continuously engaged in a variety of efforts to achieve the sustainable development of society and the environment through its business activities.

At the base of that is our management philosophy of achieving "a cheerful society" by further advancing every technology in our Group and by creating a wide range of innovative products to fulfill the dreams of the world.

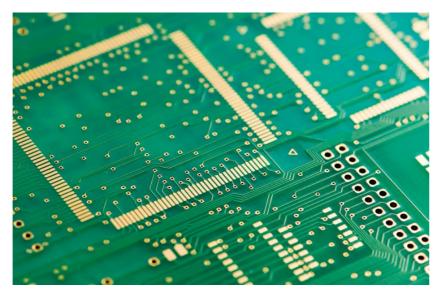
Since this philosophy and these values are compatible with the aims of the Sustainable Development Goals (SDGs), we will continue to proactively engage in diverse activities that facilitate their fulfillment.

# **SUSTAINABLE DEVELOPMENT G**ALS

### **Our Nucleus and Management Philosophy**



As we continue advancing every technology in order to achieve "a cheerful society," the Taiyo Group promotes resilient infrastructure development and comprehensive and sustainable industrialization, all while striving to create innovation.



By developing and manufacturing high-value-added chemical materials for electronic components, we contribute to innovation in a wide range of fields such as electronics and next-generation communications.

In addition to manufacturing, steadily supplying, and selling the drugs that are critical to meet society's needs, we are building a manufacturing base for new pharmaceuticals such as regenerative therapy and gene therapy.



### What We Want to Achieve through Our Business



Through efforts such as insect farming and plant factories, the Group is working to overcome food scarcity, with the aim of ensuring steady food access and improved nutritional status and promoting sustainable agriculture.



We have begun farming protein-rich crickets and are developing products for a variety of uses, from foodstuffs to feed for livestock and pets.



The Taiyo Group is contributing to people's health through the manufacturing and sales of pharmaceuticals, with the aim of ensuring healthy lifestyles and promoting the welfare of all people.



We engage in the manufacturing and sales as well as the contract manufacturing of therapeutic pharmaceuticals. We are also investing in health care-related fields in Africa and putting Japanese technology and expertise to use in efforts worldwide to solve social problems and realize sustained business.



The Taiyo Group is working proactively to develop eco-friendly floating solar power plants, thereby advancing the spread and use of renewable energy.



To ensure a state of sustainable consumption and production, we are working to carry out production using floating solar power plants and other renewable energy and to reduce waste by improving product packaging, among other measures.



We have set up 13 floating solar power facilities around Japan, which generate more renewable energy than what the Group's Electronic Materials Business in Japan consumes. Also, Taiyo Ink Mfg. participates in Apple's Supplier Clean Energy Program.

# Our Efforts to Achieve **SDGs**

### What We Want to Achieve through Our Business



The Taiyo Group is constantly striving to improve its workplace environment, in order to realize sustainable financial growth and productive full employment as well as to create a motivating, accommodating work atmosphere.



To make it easier for employees to continue working after becoming parents, we opened the Taiyo Daycare Center. Not only have we maintained a 100% return rate after maternity leave and childcare leave for the past three years, but we are also improving the workplace environment, including our employee cafeterias, so as to enhance creativity and contribute to healthy bodies and minds.







We are producing a variety of agricultural products at our plant factories to help with efforts to preserve and recover terrestrial ecosystems, to sustainably manage forests, and to address desertification.



We are growing baby leaf greens, strawberries, melons, and other produce. With the aim of enabling agriculture that doesn't require a vast expanse of land, we are striving to expand our production scale.





### What We Want to Contribute as a Company



The Taiyo Group operates a children's cafeteria called Kodomo Shokudo, along with a takeout service, in Ranzan, Saitama Prefecture, where one of our office buildings is located.



In order to provide a fun meal to as many children as possible, we operate a children's cafeteria at the Ekimae Ranzan Shokudo near one of our office buildings.



The Taiyo Group aims to facilitate inclusive, equitable, and high-quality education and to promote opportunities for lifelong learning. To this end, we welcome educational field trips to our plants, and we have donated large screen monitors and other items to educational institutions.



Taiyo Ink Mfg.'s main office offers educational field trips for local elementary and middle school students, as well as hosting chemical experiment workshops led by young employees to let children experience the wonders of chemistry.



The Group strives to create a workplace environment where each of our diverse personnel can maximize their individual qualities and talents.



In addition to hiring female directors and managers and installing gender-neutral restrooms, we are taking a variety of other steps to give full play to the qualities and talents of our diverse personnel.



The Taiyo Group has signed a comprehensive partnership agreement with Ranzan, Saitama Prefecture, in addition to providing support for COVID-19 prevention measures, and we also signed an agreement with Takatsuki, Osaka Prefecture, to take in people who are unable to return home in times of disaster.



Besides creating future employment and supporting local volunteer activities, based on the comprehensive partnership agreement, we have donated equipment that local educational institutions needed for dispersed classroom learning.



The Taiyo Group is pairing earth observation satellite data with a variety of devices on land as well as with drones, to create information services never seen before.



Using the *Michibiki* satellite positioning system, we are working to develop high value-added information services, particularly in the agricultural and infrastructure sectors.

# **Corporate Governance**

# List of Executives (as of December 15, 2021)

### Directors



**Eiji Sato**President and CEO

### Reason for appointment

After becoming a director in 2008 and later serving as Vice President, Mr. Sato assumed the position of President and CEO in 2011. Since then, he has overseen Group operations, including Group decision-making and the supervision of business execution. As President and CEO, Mr. Sato has applied his own knowledge and experience in all aspects of operations.



**Part 3** Foundation for Value Creation

Eiji Takehara

### Reason for appointment

After assuming the position of Executive Managing Officer in 2013, in 2014 Mr. Takehara became a director, Senior Executive Officer, and Compliance Officer. In his role, Mr. Takehara has worked to develop and strengthen the domestic Electronic Materials Business. Mr. Takehara has applied his own knowledge and experience in all aspects of operations.



Hitoshi Saito Director

Reason for appointment

Mr. Saito became a director and Senior Executive Officer in 2016, and as Senior Executive Officer, he has supervised the management of Group companies and been involved in important decision-making. Possessing a wealth of marketing knowledge and management experience from time spent overseas, Mr. Saito has applied this knowledge and experience to all aspects of operations.



Toshifumi Tamaki

### Reason for appointment

Since becoming a director in 2018, Mr. Tamaki has applied his vast knowledge and experience in business management, business execution, and R&D to all aspects of operations.



Masayuki Hizume Director (Outside)

### Reason for appointment

Mr. Hizume was appointed because the Company expects that he applies his expertise, vast experience, and knowledge as a certified public accountant toward operations.



Keiko Tsuchiya
Director (Outside)

### Reason for appointment

Ms. Tsuchiya was appointed because the Company expects that she applies her vast experience and knowledge in the human resources field, including her management experience as the director of multiple staffing firms, toward the Human Resources division and strengthening human resources.



Asako Aoyama Director (Outside)

### Reason for appointment

Ms. Aoyama was appointed because the Company expects that she applies her expertise as a certified public accountant and vast experience and knowledge in accounting and finance and M&A from her involvement in corporate management and business execution.



Yumiko Kamada Director (Outside)

### Reason for appointment

Ms. Kamada was appointed because the Company expects that she applies her vast experience and knowledge of corporate management and business execution experience in new business development and customer service in a different industry.

### **Audit & Supervisory Board Members**



Akihito Sakai Audit & Supervisory Board Member (Outside)

### Reason for appointment

Mr. Sakai was appointed because the Company expects that he applies his vast knowledge of finance, accounting, and law cultivated through his past business experience.



**Hidenori Sugiura** Audit & Supervisory Board Member (Outside)

### Reason for appointment

Mr. Sugiura was appointed because the Company expects that he applies his vast knowledge of finance cultivated through his history in the securities and financial industry, and from his experience as a university professor and lecturer as an expert in finance.



Masaru Oki Audit & Supervisory Board Member

### Reason for appointment

Mr. Oki was appointed because he is an expert in Group operations thanks to his many years of involvement in Group business and the Company expects that he applies his knowledge of international law and regulatory systems cultivated through his more than 15 years of experience working at overseas subsidiaries.

### Skills Matrix

	Expertise and career experience required of directors and Audit & Supervisory Board members							
Name	Corporate management Business strategies	Global business	Production quality R&D	ESG Sustainability	Talent management Diversity and inclusion	Financial accounting M&A	Legal affairs Risk management	
Eiji Sato	✓				<b>✓</b>	✓	✓	
Eiji Takehara			✓	✓	✓		✓	
Hitoshi Saito	✓	✓	✓	✓				
Toshifumi Tamaki	✓		✓	✓				
Masayuki Hizume	✓					✓	✓	
Keiko Tsuchiya		✓		✓	✓			
Asako Aoyama		✓			✓	✓		
Yumiko Kamada	✓			✓	✓			
Akihito Sakai				✓		✓	✓	
Hidenori Sugiura				✓		✓	✓	
Masaru Oki				✓		✓	✓	

### **Activities of Outside Directors (FY2021)**

	Attendance at Board of Directors meetings	Attendance at Audit & Supervisory Board meetings	Statements made during meetings of the Board of Directors / Audit & Supervisory Board and overview of duties
Masayuki Hizume	10 meetings (100%)	_	Mr. Hizume actively states his views during Board of Directors meetings particularly regarding investments and establishment of corporate venture capital, based on his specialist knowledge and abundant experience as a certified public accountant. He plays a sufficient role and executes his responsibilities in highly effective supervision of the Company's management. In addition, he serves concurrently as the chair of the Nomination Advisory Committee and Compensation Advisory Committee, participating in all meetings of both. He plays a leading role in checks and advisory functions in the process of selecting candidates for the Company's officers and determining their compensation using an objective and neutral standpoint.
Keiko Tsuchiya	10 meetings (100%)	_	Ms. Tsuchiya actively states her views during Board of Directors meetings on matters regarding enhancement of the human resource departments and talent, particularly regarding organizational design including subsidiaries and creation of growth opportunities, based on her abundant experience in the field of human resources. She fully exercises the roles and responsibilities required of an outside director, including supervision of management and advising on general management matters. In addition, she serves concurrently as a member of the Nomination Advisory Committee and Compensation Advisory Committee, participating in all meetings of both. She plays a role in checks and advisory functions in the process of selecting candidates for the Company's officers and determining their compensation using an objective and neutral standpoint.
Asako Aoyama	10 meetings (100%)	2 meetings (100%) (Prior to being appointed director on June 20, 2020)	Ms. Aoyama actively states her views during Board of Directors meetings particularly regarding investments such as M&A and capital investment and the Group's overall financial policy including approaches to foreign exchange, based on her knowledge and abundant experience as a certified public accountant as well as past experience in corporate management and execution of operations. She plays a sufficient role and executes her responsibilities in highly effective supervision of the Company's management. In addition, she serves concurrently as a member of the Nomination Advisory Committee and Compensation Advisory Committee, participating in all meetings of both. She plays a role in checks and advisory functions in the process of selecting candidates for the Company's officers and determining their compensation using an objective and neutral standpoint.
Yumiko Kamada	8 meetings (100%) (After being appointed director on June 20, 2020)	_	Ms. Kamada actively states her views during Board of Directors meetings particularly regarding capital investment and new business, based on her abundant experience in and knowledge of corporate management and business execution in the fields of new business development and client services. She fully exercises the roles and responsibilities required of an outside director, including supervision of management and advising on general management matters. In addition, she serves concurrently as a member of the Nomination Advisory Committee and Compensation Advisory Committee, participating in all meetings of both. She plays a role in checks and advisory functions in the process of selecting candidates for the Company's officers and determining their compensation using an objective and neutral standpoint.
Akihito Sakai	10 meetings (100%)	10 meetings (100%)	Mr. Sakai states his views and asks questions as needed to secure the validity and appropriateness of the Board of Directors' decision-making, based on his previous experience in business. In addition, at meetings of the Audit & Supervisory Board he attends, he discusses the results of audits and deliberates on important matters concerning audits.
Hidenori Sugiura	10 meetings (100%)	10 meetings (100%)	Mr. Sugiura states his views and asks questions as needed to secure the validity and appropriateness of the Board of Directors' decision-making, based on his abundant experience and knowledge in finance. In addition, at meetings of the Audit & Supervisory Board he attends, he discusses the results of audits and deliberates on important matters concerning audits.

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### **Corporate Governance**

### **Corporate Governance System and Internal Control System**

We have put into place a corporate governance system mainly comprised of a Board of Directors and Audit & Supervisory Board to ensure corporate transparency, fulfill our accountability, and enable sound corporate operations.

The Board of Directors discusses and resolves all important matters, and monitors business execution conducted by the President and CEO.

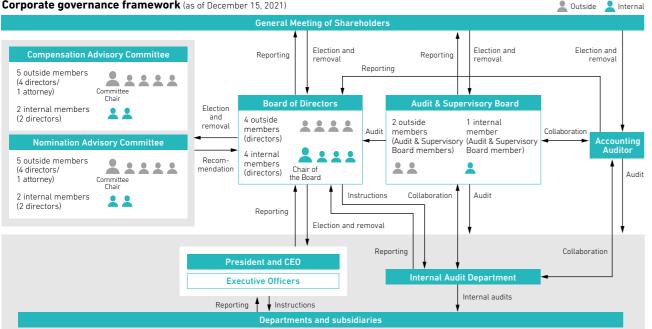
In order to further optimize the Board of Directors and accelerate business execution, we have also adopted an executive officer system that has executive officers with the authority necessary for swift decision-making. The Board of Directors deliberates on and resolves the election of executive officers, based on each candidate's careers and other qualifications. Conditions for dismissal are stipulated in relevant regulations and similarly deliberated on and resolved

by the Board of Directors.

Furthermore, we have established a voluntary Compensation Advisory Committee as an advisory body to the Board of Directors and the Audit & Supervisory Board as well as a voluntary Nomination Advisory Committee as an advisory body to the Board of Directors.

The Board of Directors has stipulated a basic policy on the development of an internal control system for appropriate corporate management and has put into place and operates a system based on this policy. The development and operation of this system is evaluated as needed by the Audit &Supervisory Board. Problems brought to light based on the results are addressed, and appropriate improvements are made to operations.

Corporate governance framework (as of December 15, 2021)



### **Compensation Advisory Committee and Nomination Advisory Committee**

We have established the Compensation Advisory Committee to secure the reasonableness and objectivity of the policy for determining compensation of Audit & Supervisory Board members as well as to secure the reasonableness, objectivity, transparency, and effectiveness of compensation paid to directors and executive officers. The committee deliberates on these, and the results are reported to the Board of Directors and the Audit & Supervisory Board. In addition, to ensure

objectivity and transparency regarding the appointment of directors and Audit & Supervisory Board members, we have established the Nomination Advisory Committee. The results by this committee are reported to the Board of Directors.

A majority of the members of both the Compensation Advisory Committee and Nomination Advisory Committee are independent outside directors, and the chairs are also selected from independent outside directors, thereby ensuring the independence of both committees.

### Compensation Advisory Committee and Nomination Advisory Committee members (as of December 15, 2021)

		Directors							Attorney
Name	Eiji Sato	Eiji Takehara	Hitoshi Saito	Toshifumi Tamaki	Masayuki Hizume	Keiko Tsuchiya	Asako Aoyama	Yumiko Kamada	Masahiko Todo
							$\vee$		
Compensation Advisory Committee	0			0	0	0	0	0	0
Nomination Advisory Committee		0		0	0	0	0	0	0

Note: ♦ indicates an outside director, © indicates committee chair (chairperson), and O indicates a committee member

### **Approach to Board Diversity**

For the supervision of business execution and to facilitate important decision-making, the Board of Directors should be composed of directors with advanced skills along with diverse knowledge and experience beyond just industries or specialized fields relevant to the Company. In addition, outside directors require advanced specialist knowledge, abundant experience outside the Company, and independence.

Based on this thinking, currently the Board of Directors is well-balanced in nature and composed of eight directors, namely, three executive directors, four independent outside directors, and one non-executive director. Furthermore, at the 74th Ordinary General Meeting of Shareholders held on June 20, 2020, two female directors were newly elected, bringing the Company's female Board representation to 37.5% (three out of eight directors).

### **Evaluation of Effectiveness of Board of Directors**

The Group conducts analysis and evaluation to assess the effectiveness of the Board of Directors. Assessments are based on evaluations provided by each director and help promote

continuous improvement to the operations, composition, and structure of the Board of Directors by identifying issues and points of improvement.

### Method of evaluating Board effectiveness and summary of results

Analysis and evaluation method	<ul> <li>Questionnaires are distributed to each director. Responses received from all directors are used to conduct an effectiveness evaluation of the Board of Directors and identify issues.</li> <li>Based on evaluation results, the Board of Directors holds deliberations regarding ways to improve its functionality.</li> </ul>				
FY2021 questionnaire content	1) Structure of the Board of Directors 2) Management of the Board of Directors 3) Agendas of the Board of Directors 4) Structure supporting the Board of Directors				
Evaluation results	<ul> <li>The Board of Directors is evaluated as operating efficiently.</li> <li>Confirmed improvements to the time required for prior review by each director and opportunities to present additional information to officers including outside directors since the Board effectiveness evaluation conducted during the previous fiscal year.</li> </ul>				
Confirmed issues and future responses	<ul> <li>Continuously evaluating the scope of agendas presented to the Board of Directors to promote further allocation of authority to subordinate bodies.</li> <li>Continue working on the following issues to achieve further effectiveness.</li> <li>1) Ensure diversity in the composition of the Board of Directors and maintain an appropriate number and ratio of outside directors.</li> <li>2) Deepen discussions on business plans from long-term perspectives, a plan for developing successors to the President and CEO, major risks affecting operations, and initiatives for sustainability.</li> </ul>				

### Officer Compensation System

### **Composition of Compensation**

The system of compensation for executive directors aims to provide motivation toward improving medium- to long-term corporate value by establishing a plan for short-term, medium-term, and long-term incentives, and thus to acquire and retain elite top management personnel. Moreover, with the goal of further sharing value between executive directors and shareholders, this system is comprised of basic salary compensation and performance-linked cash compensation as well as a stock compensation plan comprised of transfer-restricted stock and performance-linked stock compensation.

### **Compensation Determination Process**

Decisions on the calculation method, payment timing, distribution, and other matters concerning officer compensation are made by the Board of Directors within a range approved by the General Meeting of Shareholders. As part of the decision-making process, the Compensation Advisory Committee uses director compensation research data from an outside research agency to conduct an objective comparative analysis of compensation levels. After deliberation on the compensation policy and compensation levels, the committee reports to the Board of Directors, which makes the final decision based on the committee's findings.

### Compensation system for executive directors

Total compensation						
Basic salary	Performance-linked cash compensation	Stock compensation system				
compensation	(short-term incentives)	Performance-linked stock compensation (medium-term incentives)	Transfer-restricted stock compensation (long-term incentives)			
Amount determined based on position is paid.	No more than profit attributable to owners of parent x 1.6%. The total compensation amount is calculated within the scope of the above formula, with amounts allocated according to position and paid in cash.	No more than profit attributable to owners of parent x 3.4%. The total compensation amount is calculated within the scope of the the above formula, with amounts allocated according to position and contributed in cash as funds for three-year restricted stock.	As annual compensation for the execution of duties, directors are allotted cash bonus credit and allocated 10-year restricted stock (up to a maximum of 300 million yen per year).			

### Compensation structure for the President and CEO

Basic salary (10%)	Performance-linked cash compensation (19%)	Performance-linked stock compensation (61%)	Transfer-restricted stock compensation (10%)

### **Corporate Governance**

### Risk Management

The Group works to improve its risk sensitivity and risk control capabilities in order to ensure stable business operations. We evaluate and establish appropriate response measures to address the various potential risks related to our business activities.

Engaging in new business domains such as medical and pharmaceutical, energy, and food, and engaging in overseas business activities require industry-specific expertise. It is also critical that we engage in business activities with due consideration given to the relevant laws and cultural characteristics of each country. With this in mind, Group companies establish necessary regulations based on our Group-wide CSR Philosophy, and voluntarily gather information on and respond accordingly to relevant laws. At our overseas locations, we ensure appropriate business operations by conducting training on local laws and customs.

### Operating risks

- 1. Impairment risk
- 3 Patent risk

**Compliance** 

and regulations.

**Compliance Activities** 

- 6. Country risk

- we are promoting a collaborative effort by our entire Group.
  - Taiyo Holdings also works to identify the compliance situation at each Group company to provide support based on the operating environment of each company. Group companies in Japan operate under the Group-wide ethical and legal compliance system.

By sharing the status of activities reported by each company,

### **Chemical Substance Safety and Environmental Management**

Taiyo Ink Mfg., one of the Group's main subsidiaries, manages chemicals substances using a quality management system based on ISO 9001:2015. The company identifies prohibited substances based on regulations or client requests and only uses registered raw materials in product development free of prohibited substances. The company also has strict controls in place from raw materials delivery to product shipment to prevent contaminants in chemical substances.

### **Ensuring Safety of Production Processes**

The Group's production bases hold monthly meetings of the Health and Safety Committee to promote compliance with laws, regulations, ordinances, agreements, and internal standards concerning health and safety. Through monthly workplace patrols and risk assessment activities, we make improvements to dangerous locations and share their application at other similar locations, ensuring the continuous improvement of health and safety across the entire Group.

- 2. Technological innovation risk
- 4. Bankruptcy of clients
- 5. Foreign exchange risk
- 7. Risk related to the procurement

The Group recognizes that a sound management structure and strong awareness of ethics and compliance among all

employees are critical to living up to the expectations of

stakeholders and society as well as achieving long-term

growth. The Group established its compliance promotion

structure in 2003 and since then has continued to educate

employees in ethical values and foster knowledge of laws

The Group has established an internal whistleblowing

correction of internal fraud. In fiscal 2021, we conducted a

survey of employees on latent risks in the workplace and

implemented improvements and preventive measures based

on the results. Going forward, in addition to internal activities,

we will focus further on improving compliance in transactions

management focused on corporate compliance along with

system (hotline) to promote the early discovery and

with suppliers, while working toward organizational

fair and open business activities.

- 10. Developments in governments' pharmaceutical administration
- 11. Infectious disease risk 12. International tax risk including transfer pricing tax system

8. Tougher pricing competition

9. Pharmaceutical side effects, etc.

### **Compliance Training**

The Group engages in continuous employee compliance training to promote an understanding of the risk factors at the individual level and to emphasize the importance of the spirit of compliance with ethics and laws during the course of business activities.

In fiscal 2021, in addition to harassment training, which is continuously offered to all employees, we held internal training seminars to increase awareness of risks associated with corporate compliance. Also, we revamped curriculum so as to offer training tailored to the unique business and operations of each Group company and department. We will continue to enhance our education and awareness-raising activities to ensure that compliance training is applied toward business operations and to help promote better performance and the creation of a more attractive work environment.

# **Promoting ESG Management**

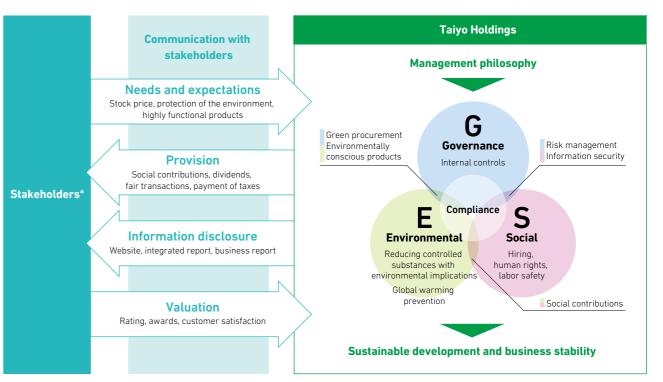
Since its founding in September 1953, the Group has achieved growth by earning the trust of its many stakeholders, including shareholders, clients, business partners, and the

Looking ahead, the Group will promote environmental, social, and governance (ESG) management using the perspective of achieving the sustainable growth and enhancement of corporate value, thereby creating economic value, social value, and environmental value for stakeholders.

To that end, we will fulfill our corporate social

responsibilities by ensuring all the Group's officers and employees comply with ethics and laws and always engage in business activities with a proactive stance. We have outlined our CSR Philosophy and Code of Conduct, and engage in various activities through a CSR organization consisting of various management systems and committees.

Furthermore, we will help the world achieve the Sustainable Development Goals (SDGs) and contribute to local community development by resolving social issues through our business.



<sup>\*</sup> Shareholders, clients, business partners, local communities, employees, etc.

### **Establishment of Long-Term Management Plan Incorporating the SDGs**

The Group's management philosophy is to achieve "a cheerful society" by further advancing every technology in our Group and by creating a wide range of innovative products to fulfill the dreams of the world. Based on this, we are working to create a foundation for industrial and technological innovations.

Even before the importance of the SDGs was in the spotlight internationally, we have been engaging in initiatives closely related to the SDGs, recognizing their vital role in sustainable improvement of corporate value. In particular, as our mainstay product, we have developed solder resists. They play an important role in advancing technology and forming a foundation for industrial and technological innovations. As other initiatives to achieve the SDGs through our business, we are promoting the spread of eco-friendly renewable energy, the breeding of insects and cultivation of fruits and leafy greens ahead of future food shortages, and the medical and pharmaceutical business.

Moreover, we carry out activities closely rooted in the local community, including participation in local events and volunteer efforts and the use of local ingredients in our cafeteria menu. We also are working toward gender equality, such as introducing gender-neutral restrooms and increasing female Board representation.

As stated in the basic policy of our Beyond Imagination 2030 long-term management plan, we will further step up these initiatives and promote related activities earnestly.

# Stakeholder Engagement

### **Shareholder and Investor Engagement**

We position cash-based profit returns to shareholders as a core policy, and return profits to shareholders in continuous, stable, and high-level manner. Specifically, we have established a target indicator for dividend on equity (DOE) in our long-term management plan, which calls for maintaining DOE of 5% or higher based on a consolidated basis.

In fiscal 2021, we paid a total dividend of 160.20 yen per share, including a commemorative dividend. (We executed a one-for-two share split of our common stock on October 1, 2021. The dividend amount assuming this share split took place at the start of fiscal 2021 is 80.10 yen per share.) For fiscal 2022, we set the interim dividend amount total as

### Trends in dividends per share

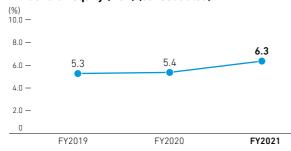


Note: We executed a one-for-two share split of our common stock on October 1, 2021. This graph was prepared assuming that this share split was executed at the start of fiscal 2019

65.10 yen per share.

Our basic policy is to provide shareholders and investors with effective information for use in their investment decisions by conducting investor relations (IR) activities that ensure accuracy, fairness, and promptness. Specific IR activities include providing IR information via our website, issuing an integrated report (former annual report), conducting financial results briefings for analysts and institutional investors, holding individual meetings with institutional investors, and holding corporate information sessions for individual investors. We also disclose English versions of our IR documents for overseas investors.

### Dividend on equity (DOE) (consolidated)



### **Customer Engagement**

Taiyo Ink Mfg., one of our main subsidiaries, operates a quality management system based on ISO 9001:2015 to conduct quality assurance, quality management, and quality improvement activities so that we can continuously provide the quality and safety that satisfies our customers.

In fiscal 2021, the Taiyo Ink Mfg.'s head office underwent a renewal inspection by a third-party institution, and Taiyo Ink Mfg.'s Kitakyushu Plant underwent a periodic inspection. Both facilities renewed their certification after confirming the conformity and effectiveness of their systems.

With the aim of continuous improvement, we will identify

risks and opportunities based on customer feedback and the Group's current situation as well as internal and external issues. In addition to response measures to address incidents that have occurred, we will engage in prevention activities such as using trend management\* and process risks prevention measures to prevent cases of non-conformance. Based on these, we will make a daily commitment to providing higher-quality products and services.

\* Trend management: Activity that promotes stable quality by confirming trends in actual measurements. This promotes measures to prevent non-conformance and helps assess product conformance with product

### **Supplier Engagement**

Taiyo lnk Mfg., one of our major subsidiaries, applies green procurement standards toward the procurement of raw materials that are eco-friendly and that promote safety and stable quality. Additionally, Taiyo Ink Mfg. works to build and strengthen relationships of trust with suppliers by conducting on-site audits and engaging in activities to promote compliance with the Subcontract Act.

Audits designed to promote improvements to raw materials and auxiliary materials are conducted by teams mainly consisting of members of the purchasing and quality assurance departments. When necessary, members of the manufacturing technology and engineering departments also participate in audits.

In fiscal 2021, in accordance with our annual audit plan, we conducted on-site audits of our suppliers to confirm the operating status of manufacturing processes and quality and environmental management systems. We also confirmed initiatives related to the management of environmentally controlled substances and environmentally hazardous substances.

To ensure compliance with the Subcontract Act, we proactively cooperate with the survey on transactions with subcontractors conducted by the Japan Fair Trade Commission, and we engage in fair trade with businesses applicable to these laws.

### **Community and Society Engagement**

To achieve harmony with the local community and society, since our founding the Group has acted as a good corporate citizen by proactively undertaking various social contribution activities.

Our Group companies partake in various partnerships to engage in a wide range of activities aimed at ensuring our ability to leave the world's limited resources for future generations, providing enrichment through all our engagements, and continuing to exist as a company that grows with society.

### **Opening of Daycare Center**

We opened the Taiyo Daycare Center attached to the Ranzan Office in Saitama Prefecture in December 2015 to ensure employees can work with peace of mind. This center features a self-contained power system that can supply electricity within the building in the event of an outage. This facility is also open to nearby children wait-listed for childcare spots, benefiting the local community.





### **Plant Tours and Chemistry Workshops**

Taiyo Ink Mfg.'s head office offers plant tours for local elementary schools to help foster the next-generation of human resources closely rooted in the community. During these tours, students visit the production line for solder resists and attend a chemistry workshop, where they create stamps with photosensitive resins. We provide a venue for students to develop an interest in chemistry.



### **Contributing to Sports Promotion**

Taiyo Holdings has had an exclusive endorsement agreement with professional badminton athlete Nozomi Okuhara since January 2019. Our corporate philosophy is to achieve "a cheerful society" by further advancing every technology in our Group and by creating a wide range of innovative products to fulfill the dreams of the world. This endorsement agreement reflects this philosophy and our commitment to contributing to society through sports. During this endorsement contract period, Ms. Okuhara competes on behalf of Taiyo Holdings while also appearing in advertisement campaigns and participating in engagement events for our employees and their families.

In addition, we have been a prize supporting partner for an e-sports tournament sponsored by Capcom Co., Ltd. since November 2021. We will continue to support this tournament and athletes to achieve "a cheerful society" for all.





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### **Cooperation as Blood Drive Supporter**

Taiyo Ink Mfg.'s head office cooperates in blood drives sponsored by the Ministry of Health, Labour and Welfare by serving as a blood drive supporter and encouraging understanding and participation among employees. Employees working at various Group companies also cooperate with the blood drives.

Recognized for those efforts, in 2017, we received a letter of commendation from the Governor of Saitama Prefecture at the Gathering of Saitama Blood Drive Supporters, an event held to recognize individuals and groups proactively participating in blood drive activities.

People's values of work and working environment are changing dramatically due to changes in laws and social perceptions along with the diversification of employers and

Given this, the Group is striving to secure self-sufficient

personnel compatible with changing organizations and society. Our efforts include supporting flexible career paths and working styles and proactively and continuously improving our workplace environment so as to provide a high degree of motivation despite a constantly changing world.

### **Initiatives for Diversity and Inclusion**

Taiyo Holdings is actively and continuously securing diverse human resources while working to develop a workplace environment and internal training systems to fully utilize the skills and traits of its workforce. The goal of these efforts is to transform our diverse workforce to our strengths, thereby building an organization that can adapt to a constantly changing market environment and create business with a sense of speed.

We will always consider the right balance that maximizes diversity based on our future business strategy and human resource strategy, and the right people will be promoted to managerial positions. Under our Beyond Imagination 2030 long-term management plan, we will implement a number of measures to further secure the diversity of our workforce.

### **Utilization of Women in the Workforce**

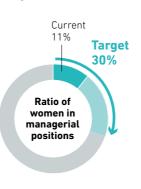
We actively utilize women in our workforce.

At the 74th Ordinary General Meeting of Shareholders held on June 20, 2020, two female directors were newly

elected, bringing the Company's female Board representation to 37.5% (three out of eight directors). In

2019, we appointed our first female executive officer, and in April 2021, two women were newly promoted to managerial positions.

As of September 30, 2021, the ratio of women in managerial positions at Taiyo Holdings was around 11%. Our goal is to increase this ratio to 30% by fiscal 2031.



### **Utilization of Non-Japanese Human Resources**

As of September 2021, there were 17 non-Japanese employees working at Taiyo Holdings. Five of these are in managerial positions, accounting for around 4% of Taiyo Holdings' total managerial positions.

### **Human Resource Development and Training System**

### **Enhancement of Training**

Aiming to be an organization filled with self-sufficient personnel, the Group conducts various training activities for each level of employee. For new employees, these include a training camp that offers an opportunity to explore the meaning of work through experience in primary industry and a six-month program where participants propose new business ideas directly to senior management. For young employees, we provide training to help them be more efficient and effective at work, and for mid-career employees and higher, we offer training to cultivate leadership skills and management perspectives.

### **Credential Acquisition Support System**

We have a credential acquisition support system to promote employee self-improvement.

To address the increase in non-Japanese employees, this system also supports those taking the Japanese Language Proficiency Test. We will continue using this system to support skills development for numerous employees.

### Number of credentialed employees by degree of difficulty

						(People)
Difficulty level*	S	Α	В	С	D	Total
FY2019	0	3	11	18	0	32
FY2020	0	2	6	8	1	17
FY2021	0	1	4	11	7	23

Tabulation boundary: Taiyo Holdings and employees seconded to

\* Difficulty level: We set difficulty levels based on the type of credential. S for credentials such as Judicial Scrivener and Certified Public Accountant; A for credentials such as Tax Attorney and Chinese Language Proficiency Test Level 1; B for Japanese Bookkeeping Proficiency Test Level 2 or a TOEIC score of 700 points or higher; C for credentials such as Industry Counselor or Basic Information Technician; D for Environmental Management Engineer Level 3 or Practical English Proficiency Test Level 3, etc.

### **Promoting Work-Life Balance**

The Taiyo Group works to maintain appropriate personnel assignments by continuously assessing Group personnel status and career growth plans. We strive to provide an engaging workplace regardless of nationality, race, gender, or age while also promoting work-life balance by supporting employees' efforts to maintain their family life while engaging in their careers.

### **Systems Supporting the Next Generation**

We support work-life balance by offering various systems, including childcare leave and reduced work hours.

Our reduced work hour system for childcare accommodates reducing daily work hours to six hours and 30 minutes for employees with children ages three to eight, which covers a longer period than the legal requirement.

We will continue to promote work-life balance as we strive to provide a comfortable work environment.

### Main support systems

(People)

System name		Number of users			
		FY2019	FY2020	FY2021	
Long-term service	Refresh leave system (refresh leave and funding provided for every five years of employment)	57	61	62	
Family care support	Family care leave and family care reduced work hour system (up to 93 days)	0	2	0	
Children	Childcare leave system (until end of year after child turns age one)	2	9	7	
Childcare support	Childcare reduced work hours system (until end of third year of elementary school)	11	7	7	
Nursing care support	Nursing care leave system	60	56	59	

Tabulation boundary: Taiyo Holdings and employees seconded to Group companies

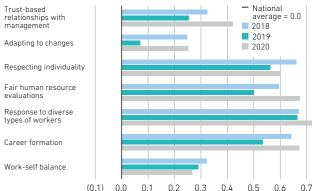
### **Creating a Comfortable Workplace**

The fundamental and most important element to corporate growth is the development of self-sufficient personnel who are able to think and act on their own. Three factors workplace environment, fair evaluations and compensation, and work motivation—are critical to developing these self-sufficient personnel.

To create a more comfortable workplace environment for our employees, in addition to providing comfortable offices and research facilities, we offer various welfare benefit programs that extend coverage to employee's family members and promote fulfilling time off.

In our stress checks, our scores greatly outperform the national average in all categories.

### Results of stress checks (2018 to 2020)

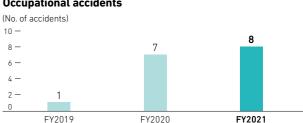


### **Occupational Health and Safety**

The Group incorporates the views of employees through communication activities such as monthly meetings of the Health and Safety Committee, and strives to create comfortable workplaces. We also conduct fire brigade training, evacuation drills, health and safety training, special health exams, and environmental measurements of the workplace. Special health exams are provided to employees working with organic solvents and specified chemical substances pursuant to the Industrial Safety and Health Act, along with employees previously involved in this work, twice a year. Environmental measurements of the workplace are conducted biannually to measure levels of organic solvents and loud noises, among other indicators.

In addition, we conduct activities to foster awareness of safety, including near miss and hazard prediction training.

### Occupational accidents



Tabulation boundary: Taiyo Holdings, Taiyo Ink Mfg., Taiyo Fine Chemicals, and Taiyo Pharma Tech

Based on this, we have established a basic environmental philosophy that states "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." We have also drawn up an environmental policy covering the areas of environmental protection, continuous improvement, reduced environmental footprint, priority environmental initiatives, and pollution prevention.

Our main Group companies have put into place ISO 14001-certified environmental management systems that promote environmental conservation activities. Our business locations with ISO 14001 certification conduct annual internal environmental audits and undergo renewal inspections once every three years and annual inspections by an external institution in an effort to maintain and improve their environmental management systems.

Furthermore, we engage in a number of environmental conservation activities, including expanding sales of eco-friendly products and promoting resource and energy conservation.

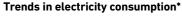
### Basic Environmental Philosophy and Environmental Policy



### Low Carbon and Decarbonization Initiatives

In recent years, climate change issues have become a worldwide problem, and in 2020 the Japanese government made a declaration on carbon neutrality. The Group has been working on various measures aimed at energy conservation measures and lowering CO2 emissions.

Taiyo Ink Mfg. publishes an energy conservation procedure manual that it revises annually. In addition, the company





<sup>\*</sup> The tabulation boundary was changed in fiscal 2021

reduces electricity consumption by optimizing operation of its cooling and warming pumps and replacing HVAC systems of its plant buildings. Taiyo Pharma Tech has many HVAC systems to maintain a clean environment inside its facilities. At its pharmaceutical manufacturing area, which consumes large amounts of energy, the company has switched to high-efficiency boilers and is promoting the use of LED lighting.

### Trends in direct CO<sub>2</sub> emissions (Scope 1 + 2)\*



<sup>\*</sup> The tabulation boundary was changed in fiscal 2021

### Utilization of Resources

### **Effective Utilization of Water Resources**

The Group is working to effectively utilize water resources to minimize impacts on the environment. Taiyo Ink Mfg. filters industrial wastewater and reuses it as cooling water for production facilities. Taiyo Pharma Tech effectively uses the cooling water of HVAC systems and manufacturing facilities to maintain the natural environment.

The Group did not have any non-conformities related to water quality approval, standards, and regulations in fiscal 2021.

### Total water usage

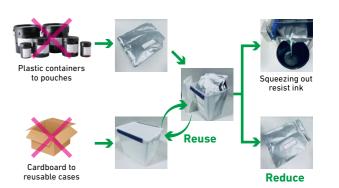


<sup>\*</sup> The tabulation boundary was changed in fiscal 2021

### **Reducing Waste**

The Group is reducing waste from cardboard and plastic containers by changing the packaging of its various products in the Electronic Materials Business. These changes began at plants in Japan, Taiwan, and China, which handle particularly large shipment volumes of products. In fiscal 2021, the changeover to new packaging was completed for around 10% of products for which changes are possible.

In addition, Taiyo Pharma Tech is working to reduce waste under an annual waste reduction target for its environmental management system.



### **Effective Utilization of Natural Capital**

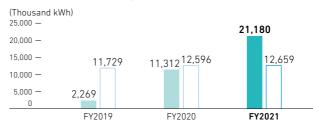
The Group owns 13 floating solar power plants in Japan. Taiyo Green Energy marked its seventh year since launching the floating solar power business, and it opened two new solar power plants in Saitama Prefecture in fiscal 2021. As a result, the electricity generated in fiscal 2021 was more than enough renewable energy to power the Group's Electronic Materials Business in Japan.

The Group will continue actively adopting renewable energy to power its production activities so that it covers 100% of the electricity needs in Japan, including the power used by the Medical and Pharmaceutical Business. In the future, we will aim to source 100% of our power needs globally from renewable sources.

### Solar power generation results

Solar power generation results

Reference: Electricity consumption of the Group's Electronic Materials Business in Japan



### Floating solar power business



Hosoike Floating Solar Plant (Gifu)



Hiraike Floating Solar Plant (Gifu)



Mimayaike Floating Solar Plant

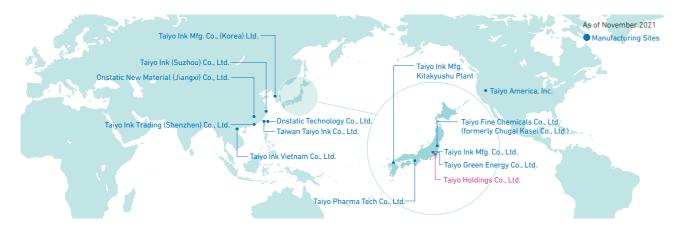


Havashiike Floating Solar Plant



Odaike Floating Solar Plant (Kagawa)

# **Manufactured Capital**



Production of printed wiring boards (PWBs) is concentrated mainly in Asia, including China, Taiwan, and southeast Asian countries. Our Electronic Materials Business has established business relationships with the world's PWB manufacturers from an early stage while responding to changes in the global business environment. Going forward, demand for PWBs used in electronics supplied to global markets is expected to continue growing. We will further strengthen our global network to respond to rapid global growth of the market.

The Group has adopted a basic policy to produce the products at facilities located in each market it supplies (local production for local consumption). This greatly increases our ability to serve clients, including developing products tailored to client needs in a much quicker manner.

In fiscal 2022, we established Taiyo Ink Vietnam Co., Ltd. in the heart of Southeast Asia, where future market growth is expected, and opened a new plant. This will allow us to shorten delivery lead time in the ASEAN region. Additionally. we relocated the Shenzhen Plant of Onstatic Technology Co., Ltd. Group (Guangdong Province, China) to the Jiangxi Plant (Jiangxi Province, China), aimed at increasing access to clients and further boosting production capacity in China, and began operations at a new building and plant at Taiwan Taiyo Ink Co., Ltd. Looking ahead, we will further strengthen and expand our manufactured capital.

### **Quality Control**

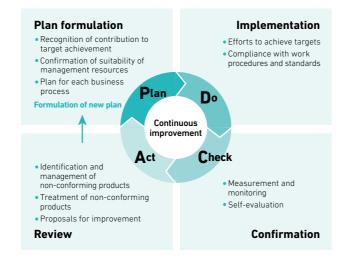
**Utilizing Management Systems for Continuous Improvement** Establishment of an effective quality management system requires a mechanism for making improvements based on client feedback, self-assessment, identified future risks and opportunities, and internal/external issues, while implementing the plan-do-check-act (PDCA) cycle.

Taiyo Ink Mfg. carries out continuous improvement activities using ISO 9001:2015 as a tool for enhancing its quality management system.

### **Preventive (Improvement) Activities for Product Quality**

Preventive (improvement) activities are essential to product quality. Taiyo Ink Mfg. strives to supply products of consistent quality to clients by not only inspecting for conformity with standards but also carrying out trend management during inspections of raw materials and products.

It is also critical to prevent non-conformities based on process risks. The Group identifies risks in every process, from raw materials acceptance to product shipment, and implements countermeasures tailored to each risk. In this manner, we are able to prevent non-conformities and deliver products with consistent quality. Taiyo Pharma Tech uses its rigorous GMP\* management to monitor and manage



operational functions of manufacturing processes and product quality as well as works to upgrade its quality system for continuous improvement of quality and production processes, in order to constantly produce high-quality products.

\* GMP stands for good manufacturing practices, referring to standards on the management of manufacturing and quality of pharmaceuticals.

# **Intellectual Capital**

The Group acquires patents with an emphasis on businesses suited to social needs or expected to generate future value. The Group is mindful of obtaining exercisable patent rights. This includes cease and desist of operations and claims for damages in response to infringement of the Group's patents. and licensing negotiations.

Operations concerning the acquisition and maintenance of patents are administered using an in-house patent management system. We use searches of patent gazettes and analysis tools to identify the patents of other companies and technology trends in society.

To address multifaceted business and technology themes, we ensure our activities contribute to business by assigning intellectual property managers with broad knowledge of technology and intellectual properties. At the same time, we provide employees with training on intellectual properties and enable them to engage in business operations mindful of patents, fostering in employees knowledge for utilizing intellectual properties and sharp sensitivities aware of technological characteristics.

The Group recognizes that developing an R&D system is an

important task for the continuous creation of business. We will increase our basic research capabilities by forming research teams specializing in medium- to long-term research without being bound by specific commercialization concepts. Furthermore, we have established a development department focused on developing new technology for commercialization and discovering new applications for existing technology. This enables us to increase our ability to link basic research results with new product development.

We are also aggressively funding capital investments for R&D and focusing on the hiring and development of talented researchers and technicians both in Japan and abroad.



FY2019

FY2020

### **Acquisition and Utilization of Intellectual Property**

The Group engages in a wide range of business fields, including electronic materials, ethical drugs, dye materials, and ICT. For this reason, we are always aware of intellectual properties and promote the acquisition and utilization of patents and trademarks.

### **Utilization of Patents**

We maintain our patents and exercise these rights as needed to maintain market share and protect our existing products including in our core business of the manufacture and sale of solder resists (SRs).

Regarding new businesses and fields, such as next-generation telecommunications, semiconductors, and the environment, we analyze patent ownership of other companies and technology trends in the market from patent information publicly available (patent literature), based on which we plan our own R&D themes. We position the utilization of patent information as one important strategy.

In terms of patent acquisition in new fields, we research proprietary technologies that set us apart from other companies, and based on trends in clients and businesses expected to use these technologies, we systematically promote the acquisition of patents for promising technologies. Among these, we are promoting the acquisition of a wide range of patents related to soluble polyphenylene ether, which is expected to be used in next-generation telecommunications, from polymer synthesis to electronic materials using this polymer (composition). In the future, under our business strategy, we will develop proprietary

technologies in fields outside of electronic materials, such as ethical drugs, synthesis of dye materials including pigments, and technology for utilization of AI, and promote the utilization of these patents.

### **Protecting Unpatented Technologies**

FY2017

One option at our disposal is to transform technical information acquired in R&D into proprietary know-how protected as trade secrets rather than acquire patents open to the public. As part of this information management, the Group utilizes an electronic notary system.

### **Trademarks**

The Group actively obtains trademarks not only for its existing products such as SRs and ethical drugs but also new businesses and products, from the standpoint of maintaining and protecting proprietary brands.

### Number of patents (as of April 1 each year)

Japan Overseas (No. of patents)



### **Taiyo Holdings Advanced Research**

# Various future-oriented activities supporting the Group's business development and long-term growth



- What is the Research Division's position and role in the Group?
- The Research Division is the nucleus of the Group's research pursuits conducting a wide range of activities in basic research, seeking solutions to technical challenges, creating new businesses, and generating synergies through M&A.

The Research Division contributes to the Group's long-term growth by working closely with Group companies on initiatives ranging from basic research to creating new businesses and developing our human resources following our vision of "creating businesses, strengthening Taiyo, and transforming Taiyo." We have three missions: to address the Group's challenges, to contribute to the cultivation of organic growth, and to generate rapid growth.

We advance basic research, conduct market research, and seek to improve our research systems and work environments throughout the Group so all of our companies are in prime position to take on new challenges. Our activities to further the Group's organic growth include working through some 200 technical requests from Group companies each year ranging from developing specific technologies and explicating mechanisms to analyzing and elucidating defects and abnormalities. We are also strengthening the Group's business continuity plan by developing new and alternative raw materials and improving our competitiveness by promoting DX. Generating rapid growth for the Group will require astute M&A aimed at boosting our competitiveness and raising our corporate value. We conduct the research, due diligence, post-merger management, and other actions needed for successful and fruitful M&A.

- 1) What differentiates the Group's research?
- $\Delta$ 7 We use evaluation technologies with the latest assessment and analysis equipment to create new technologies and products that anticipate market trends and provide the new value our customers seek.

The Group provides products and services, but what our customers are really looking for is the value in the quality of our products—the physical and electrical characteristics of electronic materials, and the safety and efficacy of the pharmaceuticals we contract to manufacture. It is essential that we have the same idea and perspective on the quality that a product must have, and that we have the technical ability to evaluate and ensure that our products have the value that customers need. The Group has long understood the critical role that evaluation technology holds, and we have been consistently strengthening our evaluation systems with the latest assessment and analysis equipment.

We presently have a complete range of chemical analysis equipment, giving us full capability to carry out in-house measurement and analysis of chemical structure determination and thermal, electrical, and mechanical behavior. We also have a complete set of equipment for processing our core solder resist (SR) products and the ability to simulate a customer's production site to solve technical issues and develop new proposals. In our new foray into the medical and pharmaceutical field, we have introduced equipment that is compliant with good manufacturing practices (GMP) and are applying our sophisticated evaluation technologies and infrastructure with the aims of creating new products and technologies in anticipation of market trends and quickly providing products with the value our customers really need.

- **1** What areas is the Group focusing going forward?
- $\Lambda3$  We are focusing on creating new businesses in the field of semiconductor peripheral materials, improving our environmental performance, and advancing DX to enhance the Group's competitiveness.

In the Electronic Materials Business, we are developing businesses in semiconductor peripheral materials and display materials and in functional films. In the Medical and Pharmaceutical Business, we are focusing on the regenerative therapy and active pharmaceutical ingredients and intermediates fields. We are also taking steps to strengthen our business sustainability, particularly by researching eco-friendly materials and by conducting environmental impact surveys related to floating solar power plants.

We are also fostering a corporate culture that will actively

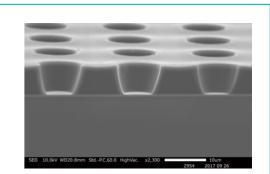
incorporate and take advantage of DX, which is important to enhancing the Group's competitiveness. The wealth of SR knowledge and technical data that we have is a huge asset that we can use as big data. We can then use Al-based systems empowered by big data and machine learning to automate routine processes in product development and create an environment where engineers can concentrate on more innovative work.

Sustainable growth for the Group will also depend on us having self-sufficient personnel capable of leading us toward our future. The Research Division is seeking to attract talented individuals through a variety of activities, including offering internships and holding seminars on creating new businesses and the future direction of the chemical industry. The division is also vigorously investing in improving the work environment and creating an atmosphere that encourages the development of self-sufficient personnel. The Research Division is engaging in forward-looking activities that go beyond the conventional domain of research to prepare the Group for success 10 and 20 years in the future.

### **New and Noteworthy**

### Gold Award and Merit Award Received at the 15th Electronic Circuits World Convention

At the 15th Electronic Circuits World Convention, an international symposium held every three years in different cities around the world, Taiyo Holdings received the Gold Award for its research on novel low-temperature curable positive-tone photosensitive polybenzoxazole and Taiyo Ink Mfg. received a Merit Award for research on organic composite materials for 5G application.



A fine pattern formation made by the product Substrate: Copper sputtered silicon wafer with φ 6 micron diameter underside

# **Part 4** Financial Information / Company Information

# **Key Financial and Non-Financial Data (Six Years)**

Taiyo Holdings Co., Ltd. and consolidated subsidiaries Fiscal years ended March 31

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
erating results (Millions of yen)						
Net sales	49,843	47,866	52,241	59,389	70,627	80,991
Cost of sales	27,355	26,220	27,304	33,043	41,574	46,125
Selling, general and administrative expenses	11,522	12,424	13,599	18,247	19,917	20,922
Operating income	10,964	9,221	11,337	8,099	9,136	13,943
Profit attributable to owners of parent	7,796	6,398	4,856	4,396	3,749	9,529
Depreciation	1,891	2,485	2,284	3,357	5,283	6,994
sh flows (Millions of yen)						
Cash flows from operating activities	10,546	9,042	8,100	5,907	13,739	16,312
Cash flows from investing activities	(6,750)	(1,063)	(24,161)	(5,487)	(45,912)	(11,603)
Cash flows from financing activities	(2,740)	20,342	11,319	(12,001)	31,593	19,755
ancial position (end of fiscal year) (Millions of yen)						
Total assets	65,464	92,386	111,490	105,666	142,192	179,001
Total property, plant and equipment	19,644	18,389	17,923	22,313	44,761	46,348
Total liabilities	20,214	20,540	38,467	35,146	72,668	102,504
Non-controlling interests	2,135	782	363	337	301	357
Total net assets	45,250	71,846	73,023	70,520	69,523	76,497
ck-related information  Per share information (Yen)						
Basic earnings per share	337.99	266.46	168.55	152.71	131.99	334.97
Dividends per share	110.00	120.10	160.20	130.20	130.20	160.20
Net assets per share	1,865.94	2,468.99	2,520.68	2,475.36	2,434.23	2,696.84
Total number of shares issued (Shares)	27,485,600	28,841,100	28,865,194	28,910,436	28,969,647	28,998,502
ancial indicators						
Operating margin (%)	22.0	19.3	21.7	13.6	12.9	17.2
D 1 (0/)	19.0	11.2	6.8	6.2	5.4	13.1
Return on equity (%)						<b>10</b> F
Equity ratio (%)	65.9	76.9	65.2	66.4	48.7	42.5
		76.9 5.6	65.2 6.5	66.4 5.3	48.7 5.4	42.5 6.3
Equity ratio (%) Dividend on equity (%)	65.9					
Equity ratio (%) Dividend on equity (%)	65.9					
Equity ratio (%)  Dividend on equity (%)  n-financial information	65.9 6.6	5.6	6.5	5.3	5.4	6.3
Equity ratio (%)  Dividend on equity (%)  n-financial information  Number of employees (People)	65.9 6.6 1,202	1,249	1,268	1,614	1,988	2,067
Equity ratio (%)  Dividend on equity (%)  n-financial information  Number of employees (People)  Electricity consumption (Thousand kWh)*	65.9 6.6 1,202 10,279	1,249 9,696	1,268 9,057	5.3 1,614 8,538	1,988 8,325	2,067 37,943

<sup>\*</sup> The tabulation boundary was changed in fiscal 2021 to include Taiyo Ink Mfg. Kitakyushu Plant, Taiyo Fine Chemicals, and Taiyo Pharma Tech.

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# Company Information (as of March 31, 2021)

### **Corporate Overview**

Company name Taiyo Holdings Co., Ltd.

Head office location 16F, Metropolitan Plaza Bldg., 1-11-1

Nishi-Ikebukuro, Toshima-ku, Tokyo 171-0021, Japan

Telephone number 81-3-5953-5200 (main)

Holdings company, Group management

September 29, 1953

policy creation, and business management

9,499.84 million yen Capital

Consolidated: 2,067 / Nonconsolidated: 133 No. of employees

### **List of Executives**

President and CEO	Eiji Sato
Director	Eiji Takehara
Director	Hitoshi Saito
Director	Toshifumi Tamaki
Outside Director	Masayuki Hizume
Outside Director	Keiko Tsuchiya
Outside Director	Asako Aoyama
Outside Director	Yumiko Kamada
Outside Audit & Supervisory Board Member	Akihito Sakai
Outside Audit & Supervisory Board Member	Hidenori Sugiura
Audit & Supervisory Board Member	Masaru Oki

### **Group Companies**

Date established

Taiyo Ink Mfg. Co., Ltd.



Taiyo Pharma Co., Ltd.

Overseas

Taiwan Taiyo Ink Co., Ltd.

Taiyo Ink (Suzhou) Co., Ltd.

Taiyo Circuit Automation, Inc.

Onstatic Technology Co., Ltd.

Taiyo Ink Vietnam Co., Ltd.

Onstatic Ink (Shenzhen) Co., Ltd.

Onstatic New Material (Jiangxi) Co., Ltd.

Taiyo America, Inc.

Taiyo Ink Mfg. Co., (Korea) Ltd.



Taiyo Fine Chemicals Co., Ltd.



Taiyo Pharma Tech Co., Ltd.



funlead corp.



Taiyo Ink International (Singapore) Pte Ltd Taiyo Ink International (HK) Limited

Taiyo Ink Trading (Shenzhen) Co., Ltd.



Taiyo Ink Products Co., Ltd. Taiyo Trading (Thailand) Co., Ltd.

funlead

Taiyo Green Energy Co., Ltd.

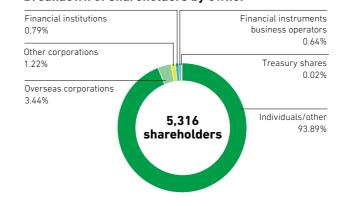


# **Status of Stock**

Total number of shares authorized	50,200,000
Common shares	50,000,000
Series I Class A shares	100,000
Series II Class A shares	100,000
Total number of shares issued	28,998,502
Common shares	28,998,502
Series I Class A shares	0
Series II Class A shares	0
Number of shareholders	5,316
Number of shares in one unit	100

Stock Information (as of March 31, 2021)

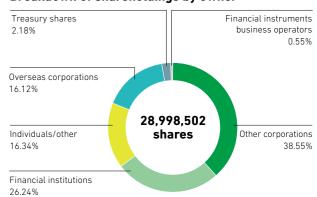
### Breakdown of shareholders by owner



### Major shareholders

Shares held (Thousands)	Share ratio (%)
5,617	19.80
3,636	12.82
2,041	7.20
1,817	6.41
1,679	5.92
1,116	3.93
745	2.63
538	1.90
422	1.49
402	1.42
	(Thousands) 5,617 3,636 2,041 1,817 1,679 1,116 745 538 422

### Breakdown of shareholdings by owner



### **Corporate Website**

The Taiyo Group proactively engages in the disclosure of various information, including corporate information

and financial information. For more detailed information, please visit the Group's corporate website.

https://www.taiyo-hd.co.jp/en/





16F, Metropolitan Plaza Bldg., 1-11-1 Nishi-Ikebukuro, Toshima-ku, Tokyo 171-0021, Japan TEL: 81-3-5953-5200 (main) FAX: 81-3-5953-5210 https://www.taiyo-hd.co.jp/en/