# IBIDEN Co., Ltd. Integrated Report 2022

Year Ended March 31, 2022





We contribute to the progression of society through innovative technology, with respect for both individuals and the global environment.

# MSS (

Trust through Integrity



**IBI-TECHNO** Innovation

**Value Creation** 

Strategy

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Medium- to Long-Term Management

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# Notices on Forward-Looking Statements

#### This report includes forward-looking statements and future plans based on information currently available to IBIDEN Co., Ltd. Statements contain potential risks and uncertainties and may differ from actual business results and future operational developments. Therefore, the accuracy of forward-looking statements and statements on future plans are not guaranteed

Scope of Reporting IBIDEN Co., Ltd. and its group companies % As a general rule, this report covers IBIDEN Co., Ltd. and consolidated subsidiaries. Some items individually state the scope of reporting.

Period Under Review for Reporting

April 1, 2021 to March 31, 2022

**ESG Management** 

43 DX Strategy

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Quality Management

% Some information outside the applicable period is also included.

In ann ann ann

"Wa" Teamwork and

Synergy

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# Guidelines Used as Reference

· Ministry of Economy, Trade and Industry / Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation IIRC / The International <IR> Framework Task Force on Climate-related Financial Disclosures (TCFD)

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and Financial Condition



# Introduction



Executive Vice President. Representative Director

# Masahiko Ikuta

At the IBIDEN Group, we publish our Integrated Report with the aim of informing shareholders, investors, and other stakeholders about the Group's medium- to long-term initiatives toward value creation.

In this report, we have compiled financial and non-financial information comprehensively with a focus on initiatives to enhance sustainable corporate value, and have summarized our value creation story and specific initiatives to realize our medium-term management plan. This issue has newly covered our intellectual property strategies and digital transformation (DX) initiatives

In preparing the report, all sections of the company work together in good faith, going through deliberation and approval by the Management Council of its contents and subsequent reporting to the Board of Directors.

We will continue to disclose information to our stakeholders timely and appropriately and engage in dialogue with you to facilitate further understanding of the Group

|                     | Information Disclosure Structure                                 |                      |                 |     |  |  |
|---------------------|--|----------------------|-----------------|-----|--|--|
| ita                 | Financial Informa<br>Investor Relations<br>https://www.ibiden.co |                      |                 |     |  |  |
| ce                  | Securities Report<br>https://www.ibiden.c<br>securities/         | 5                    |                 |     |  |  |
| nation              |  | Integrated<br>Report |                 | WEB |  |  |
|                     | Non-Financial<br>Information                                     | 2022                 |                 |     |  |  |
|                     | ESG Information<br>https://www.ibiden.c                          | com/esg/             | iyas.<br>I.220I |     |  |  |
| 1                   | About IBIDEN<br>https://www.ibiden.c                             | com/company/         |                 |     |  |  |
| for<br>tive<br>tion | Corporate Governa<br>https://www.ibiden.co<br>governance/        |                      |                 |     |  |  |
|                     |  |                      |                 |     |  |  |

# **Financial and Corporate Data**

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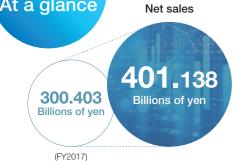


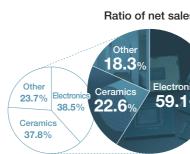
# A 110 Years of History and Beyond

"Create what will be needed by the society in the future based on core technologies."

# Present Past Future 1912 IC Package Substrate for PC-Data Cente **Businesses and** technology Founded as a power generation company development to help Established Ibigawa Electric Power Co., Ltd.. Appointed Yujiro Tachikawa as the first president. resolve social issues 1951 Diesel Particulate Filter Greening business Transformed into a manufacturing company Through the postwar recovery, expanded the electric furnace business, which formed the foundation for carbon products. Slope greenification system (GT frame Method®) 1974 Diverse human resources Overcame oil crisis by creating new **businesses** Entered into the electronic circuits business. Established the first printed substrate plant. 1995 IBI I BSS Electronics Operation grew significantly Use of clean Started transaction with a largest mobile 1225 phone manufacturer. energy **Kinuura Plant** 2000 Higashi-Yokoyama Power Plant Water floating solar power generation plant **Ceramics Operation made** a phenomenal growth by offering eco-friendly products (DPF) Silicon carbide diesel particulate ilters were adopted by a major

At a glance





automobile manufacturer.

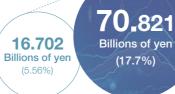
(FY2017) 💭 See P.29-35 Growth Strategies for Operations

Ratio of net sales



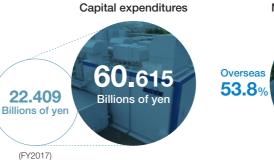
income to net sales ratio)

Operating income (Operating



(FY2017)





See P.39-42 Human Resource Development



# **Electronics Field**



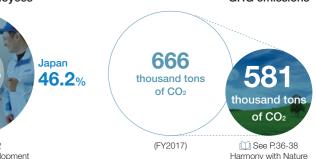
# **NEV\*** Field





Numbers of employees

**GHG** emissions



IBIDEN Co., Ltd. Integrated Report 2022 04

# To The Next Stage

**IBIDEN WAY** MISSION We contribute to the progression of society hrough innovative technology with respect for both individuals and the global environment. SPIRIT

Trust through Integrity "Wa" Teamwork and Synergy Challenge with Passion IBI-TECHNO Innovation

"Power to overcome many adversities with all our employees and to continue to exist"

"Wisdom and vitality that have achieved dramatic growth in recent vears"

# **BIDEN WAY**

**MISSION** 

# **SPIRIT**

Trust through Integrity Gaining customer and societal trust through "Genchi Genbutsu.\* Genchi Genbutsu: Go and See for yourself to thoroughly understand the situation

# Challenge with Passion Anticipating change,

and acting boldly to create new value.

※ "IBI-TECHNO" The common spirit of all company people, expressing our determination to create new technologies through fusions and composites of our



We contribute to the progression of society through innovative technology, with respect for

both individuals and the global environment.

Synergy

greater power.

and ingenuity.

"Wa" Teamwork and

Integrating knowledge and wisdom

from the employee involvement for

**IBI-TECHNO** Innovation

Evolving by overcoming

hurdles through creativity

# Co-Creation of Value with Society IBIDEN Group's ESG Management and Contribution to the SDGs

# **IBIDEN** Group's approach to ESG

IBIDEN Group upholds a "harmonious relationship with the natural environment" and the "realization of the progression of society" as key goals in its Corporate Philosophy. The Group has continued to grow by developing products that can lead to solving social problems with its innovative technologies. Considering that contribution to the progression of society and solving social problems through its business are the essence of its Corporate Philosophy, the Group has engaged in ESG (environment, society, and governance) activities.

# Evolving from CSR to ESG Activities

Based on the Corporate Philosophy and Group Charter of Behavior, the Group has built a foundation for meeting its Corporate Social Responsibility as part of its CSR management. Lately, we have conducted relevant activities as part of our ESG management, being highly rated by external evaluation for our performance of the activities from the perspective of ESG (environment, society and governance). In the future, we will offer solutions to social problems with our technologies to achieve a sustainable society, which the international community jointly aims to realize, through our businesses and operational activities.

# Key issues and SDGs specifically addressed by the IBIDEN Group

The IBIDEN Group recognizes the important issues it must contribute to through its business environment and mediumterm management plan to realize a sustainable society as stated in our Corporate Philosophy. Also, from the perspective of the importance for external stakeholders, such as the expectations and demands that customers, investors, and markets have, we will make contribution by taking on challenges through technology and business activities and strengthening our fundamental activities.

#### Contribution through technologies and business activities Achieve digital innovation Improve air quality (environmental pollution) Transition to a decarbonized society

IC Package Substrate of high function and reliability Innovation of fine

Diesel particulate filters (DPF)

# wiring technologies

catalysts for cleaning exhaust dases

# New Challenges to Resolve Social Issues



Material for EV Battery Develop and commercialize nextgeneration NEV Production for carbon eutrality

# Activate human resources and corporate culture



 Promotion of diversity (female advancement. etc.) • Realizing both rewarding work for employees and high productivity Safe and secure working environment

\* We believe that our Group's technologies and business activities can also widely contribute to goals other than SDGs specified above



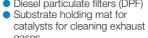


Management



# IBIDEN Group and the SDGs

We believe that to positively contribute to achieving the Sustainable Development Goals (SDGs) through its businesses is a mission that IBIDEN should fulfill for technologies of the Group, through responsible corporate activities in harmony with human life and the globa environment, thereby contributing to the achievement of the SDGs





- Supply of clean energy Advanced ceramics products
- Forest conservation Enhanced disaster prevention, etc.



# **Plant Activator**

Support healthy plant growth for sustainable agriculture

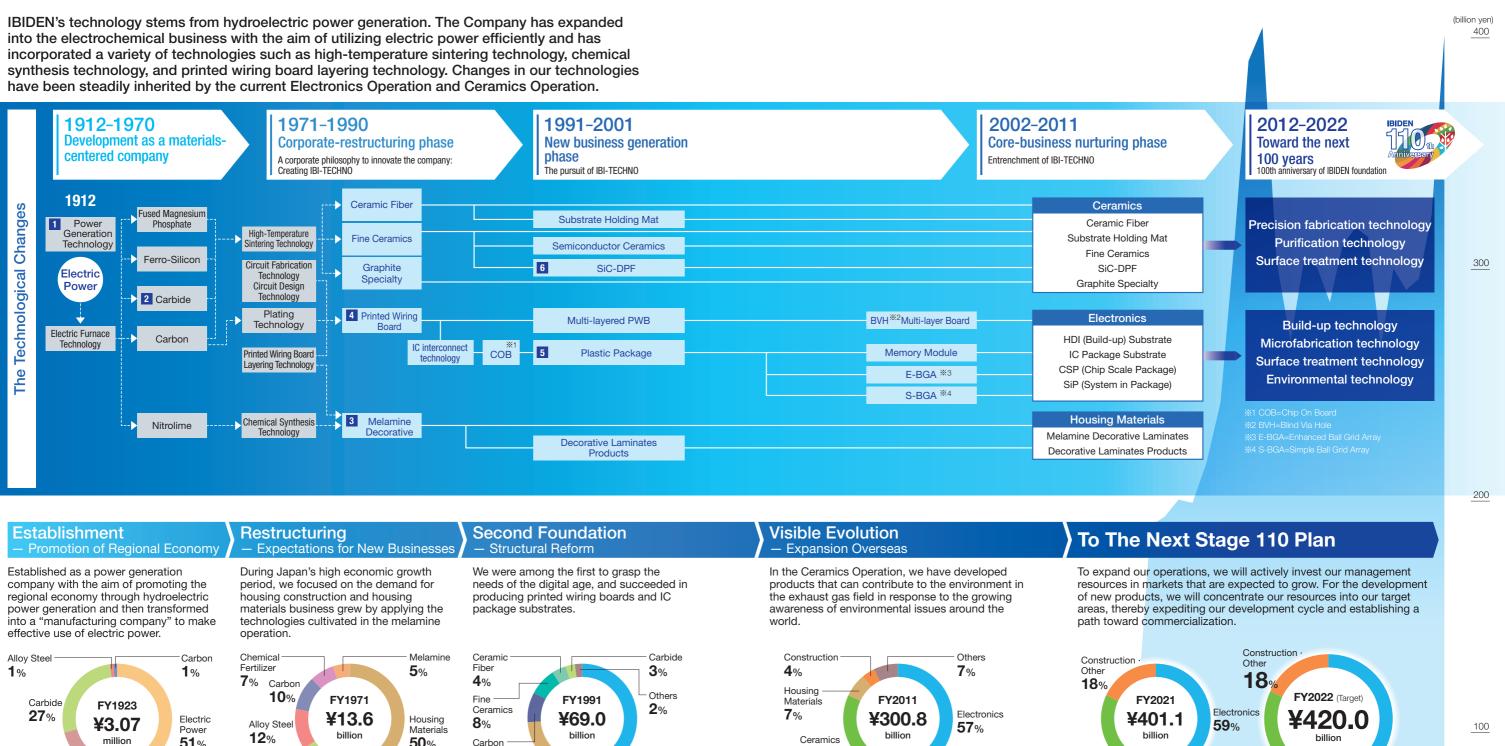
# Contribution by enhancing basic activities

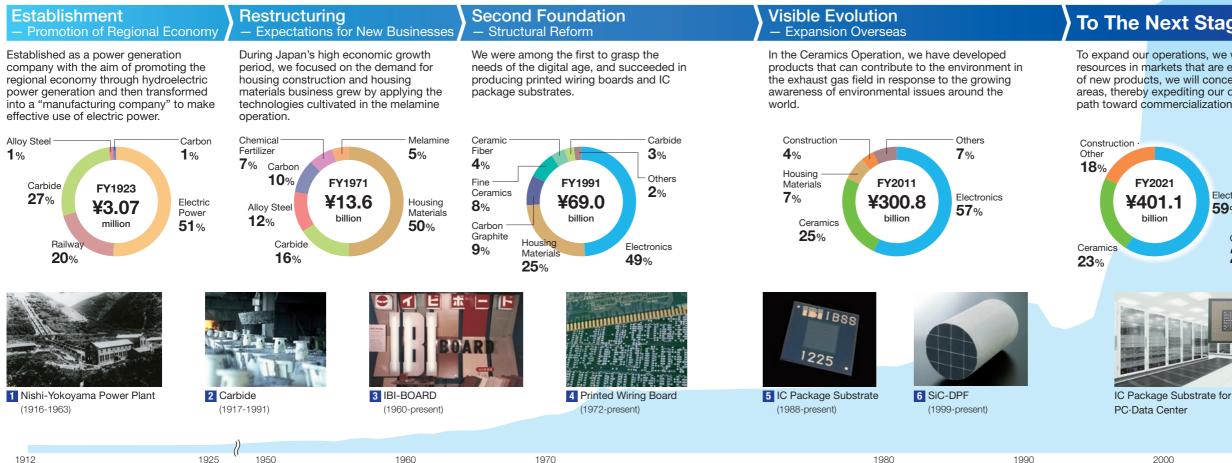
# Reduce environmental impact in a product lifecycle



• Emission control of greenhouse gases Reduction in water usage and thorough control over wastewater Control of wastes and chemicals

# **Changes in Creating Value**





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ESG Management



SiC-DPF for heavy commercial vehicles

Ceramic

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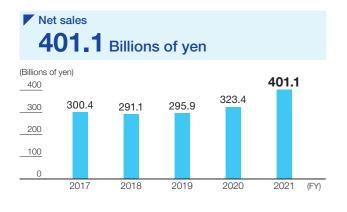
2021 (FY

Electronics

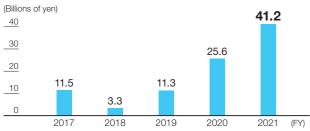
**61**%

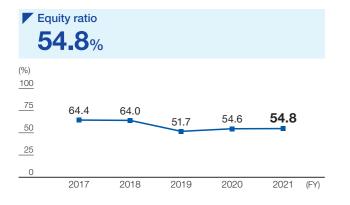
# Performance Highlight

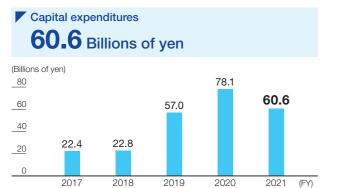
# **Financial Highlight**

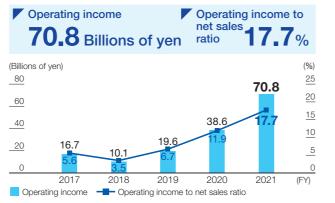


Profit attributable to owners of parent 41.2 Billions of yen

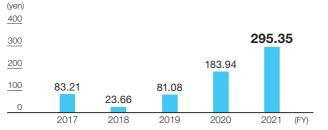




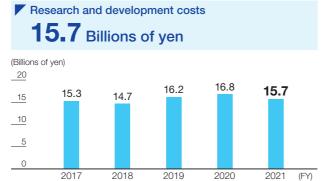




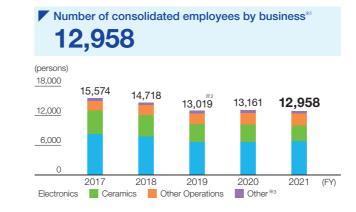


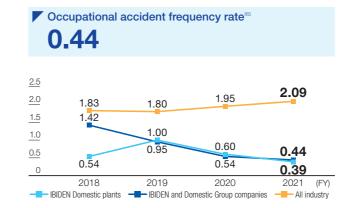






# **Non-Financial Highlight**





✓ GHG emissions<sup>™</sup> 581 thousand tons of CO2 (thousand tons of CO<sub>2</sub>) 800 666 640 600 606 581 574 400 200 134 2018 2019 2021 (FY) 2017 2020 Direct CO<sub>2</sub> emissions (Scope1) Indirect CO<sub>2</sub> emissions (Scope2)

%1 This indicates the number of persons in employment, and does not include temporary employees. 3/2 A decrease of 1,699 in the number of employees in fiscal 2019 is mainly attributable to personnel reduction in consolidated overseas manufacturing companies. %3 This indicates employees of the Management Division.

3/24 Figures are for IBIDEN Co., Ltd.. This indicates the number of persons in employment, and does not include temporary employees. Also, the number of non-consolidated employees does not include seconded employees

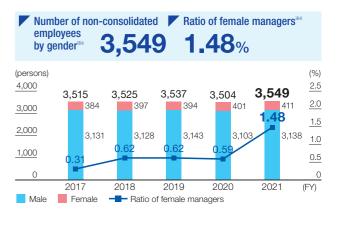
\*\*5 This indicates the number of work-related injury or death cases (equivalent to or more serious than cases of occupational accidents resulting in lost workdays) among a total of 1 million actual working hours.

%6 Figures are for IBIDEN Group.

3%7 With regard to the CO2 emission factor at the time of calculation, we used the factor provided by the "List of Calculation Methods/Emission Factors in the Calculation, Report and Publication System" of the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan as well as by gas distribution companies. From fiscal year 2020, when calculating the indirect CO2 emissions (Scope 2), we use the conversion factors (IEA Emissions Factors 2020) published by the International Energy Agency when the CO2 emission factors of electric utility companies are uncertain, in order to provide information closer to the actual state. The CO2 emissions in fiscal year 2020 are recalculated using the emission factors as of January 2022. Please note that we have revised the method of calculating waste volumes since FY2021. More detailed data are now available on our website.

Please visit our website for details of our social data https://www.ibiden.com/esg/data/social/

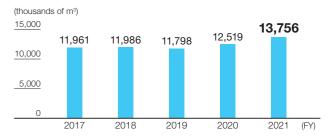












Please visit our website for details of our environmental data https://www.ibiden.com/esg/data/environment/



# Main Businesses and Core Technology

# Electronics



Having access to information communication technology is important to build infrastructure for industrialization and innovation set out by SDG 9.

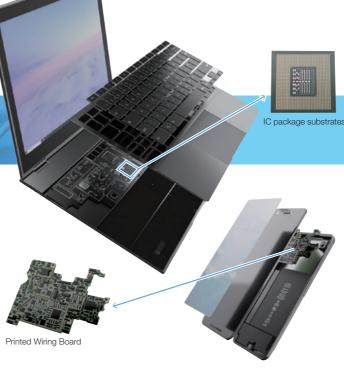
Supports communication technologies such as data centers to realize global digital innovation by producing IC package substrates of high performance and reliability.

Growth Strategy | P29



# **Data Center**

A large number of microprocessors are used at data centers that process huge quantities of data. The demand for IC packaging substrates used in data centers is on the rise as more and more services are handling big data. IBIDEN supports the superior reliability of data centers with IC packaging featuring high-functionality and high-reliability.



Introduction

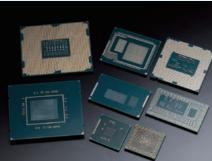
# **Computer & Smartphone**

At the heart of computers, semiconductors are small chips with a size of only a few millimeters to a few dozen millimeters. IC package substrates are used to implement these semiconductors with techniques that allow the chips to function at 100% performance. Various electronic devices and peripheral equipment are incorporated in smartphones featuring a variety of functions. Thin printed wiring boards with many layers are used to bring out the capabilities of multiple electronic devices within limits on size and thickness.

# **Core Technologies in Electronics**

# IC Package Substrate

Focusing on MPUs (micro processor unit) for personal computers and the Data Center, and GPUs (graphic processor unit) for AI and vehiclemounted applications, we provide state-of-the-art IC packaging substrates. IC packaging substrate is an important component that functions together with IC chips. IBIDEN has always enhanced added values along with IC chip evolution.



IC Package Substrate



IC Package Substrate for mobile PC

#### Printed Wiring Board

Focusing on high-end smartphones, we provide high-function and high-density printed circuit boards. A printed circuit board is an important component that supports the manufacturing of small and high-function products in line with the full-fledged dissemination of 5G. IBIDEN meets its customers' needs using Modified Semi Additive Process (MSAP) which enables free circuit design and high-density wiring.

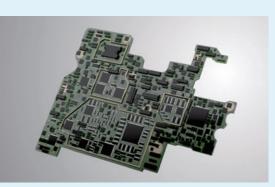
X Modified Semi Additive Process





# **Car Electronics**

The number of electronic components and sensors installed on automobiles have dramatically increased against a backdrop of advancements in analysis using big data and high-speed communication networks. Semiconductors used on all systems that control automobiles, IC package substrates to which these are installed, as well as motherboards on which those packages are implemented, are used widely as components for automobiles that require strict reliability.



Printed Wiring Board for Smartphones

# Main Businesses and Core Technology

# Ceramics



Aiming to create towns where people can continue to live their lives for generations as set out by SDG 11, we need to control the negative effects that our lives and activities have on the environment.

Contributes to the global improvement of air quality through the supply of diesel particulate filters (DPF) and substrate holding mats (AFP) that purify exhaust gas from vehicles.

Growth Strategy | P31



# **Automobile**

Many products are used, including SiC-DPF (diesel particulate filter), which removes the black smoke emitted by diesel engines, and felt-like ceramic fibers (alumina fibers) to fix substrate of catalysts for cleaning exhaust gases installed in exhaust pipes and thereby prevent exhaust gas leakage.

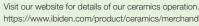
# **Core Technologies in Ceramics**

# Automotive Exhaust System Components (DPF-AFP)

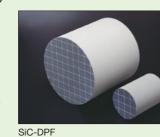
Diesel Particulate Filter (DPF), have grown as a standard component of the industry due to their performance and reliability. In the category of Substrate Holding Mat (MAT), we also provide products that meet market trends, achieving a high reputation and share in the market. We will continue to develop high-performance products and to reduce damage to the environment for the next generation.

### Graphite Specialty (FGM)

Made with the excellent properties of high strength, high purity and high durability, our graphite products are contributing to the growth of leading-edge industries of every type including high-grade materials for semiconductor manufacturing equipment, electrode materials for electric-discharge machining use, materials for solar cell manufacturing equipment, and more.



https://www.ibiden.com/product/ceramics/merchandise





Substrate Holding Mat

# High Temperature Insulation Material

Offering excellent heat resistance and insulating performance, this is available as both material and formed products, and is widely used in industrial products such as sintered bodies and fuel cells.



# Others

Technologies and products created from "IBI-TECHNO" are inherited to domestic group companies, have unique competitiveness and are contributing to various fields.

Operating system and network construction, sales of custom software, including comprehensive health testing systems [TAK Co., Ltd.]

Development and production of dehydrated food, development of textured vegetable protein [IBIDEN Bussan Co., Ltd.]

# Construction

Our own and innovative technology, which is a fusion of slope facing technology and landscaping, contributes to create better symbiosis between human beings and the natural environment.



# Housing Materials

To realize a safer and more secure living space, we contribute by providing high-performance products including antiviral coating material centered on melamine decorative laminates.

**Electric Power Business** 

The Company, which began with hydroelectric power generation, still owns three hydroelectric power plants today, including the Higashi Yokoyama Power Plant. In 2016, renovations were conducted to support the renewable energy feed-in tariff (FIT), supporting the Company's business as stable sources of revenue over the medium to long term. Technologies fostered in hydroelectric power generation are deployed in various power generation operations, such as solar power, and contribute to providing renewable energy that puts little stress on the environment.

Visit our website for details of our other operation https://www.ibiden.com/product/group/



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ESG Management

**Financial and Corporate Data** 



Rooftop Greening (Waseda Arena)



IBI-BOARD: high-pressure decorative



Viruhael: antiviral melamine decorative laminates

Visit our website for details of our group companies in Japar https://www.ibiden.com/company/profile/globalization-japan-group/





# Contributing SDGs



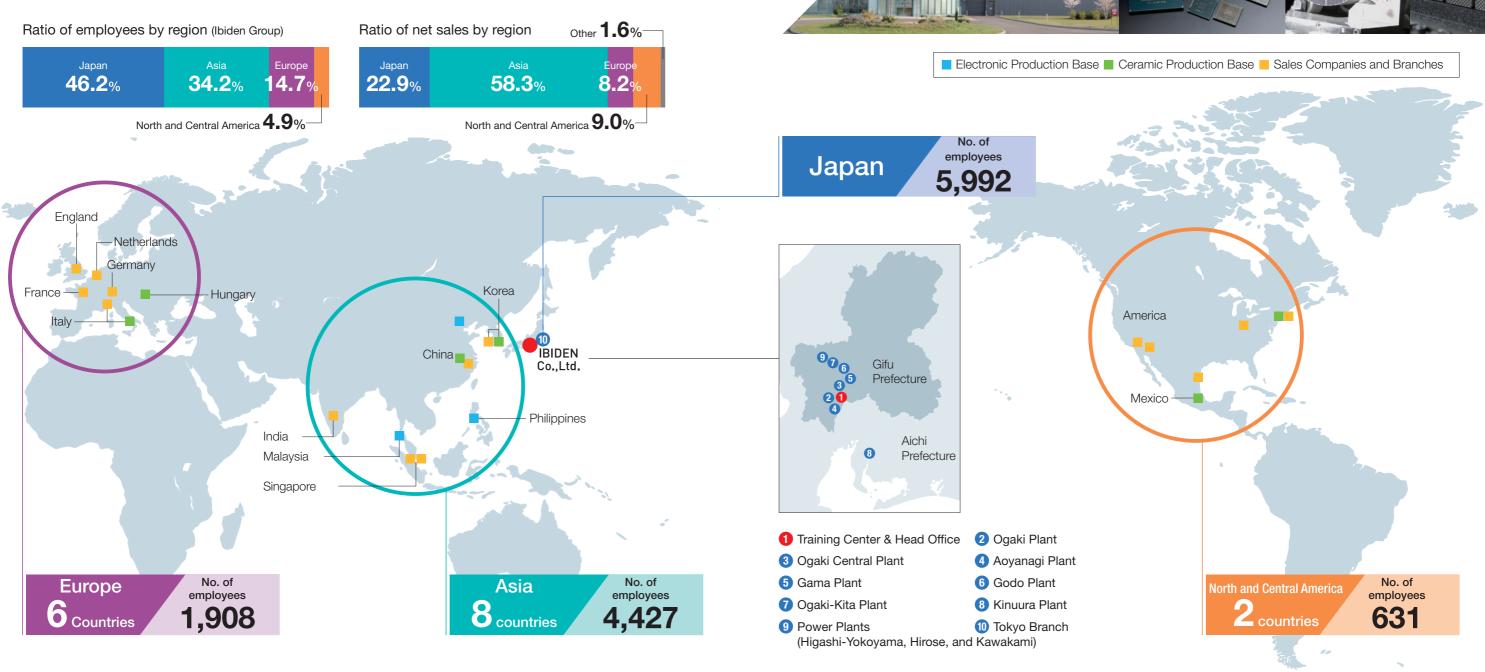
#### Contributing SDGs





# **Global Support Structure**

Since establishing IBIDEN U.S.A. Corp. in the United States as a foothold for overseas expansion in 1987, the Company has achieved full-blown expansion in overseas areas. Maintaining technology and quality fostered in Japan, we have established a global support structure by adapting to business environments, customer needs, and geographical risk.



Electronics operation Operates mainly in Asia with the mother plant based in Japan.



Ogaki Central Plant (IC Package Substrate)



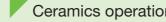
**IBIDEN** Philippines, Inc. (IC Package Substrate)



**IBIDEN Electronics** Malaysia Sdn. Bhd. (IC Package Substrate)



**IBIDEN Electronics** (Beijing) Co., Ltd. (Printed Wiring Board)



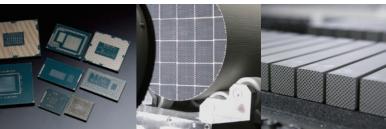




Kinuura Plant (Substrate Holding Mat)

IBIDEN Hungary Kft. (SiC-DPF, Substrate Holding Mat)

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# Ceramics operation We have a supply system in the three regions of Asia, Europe and North America.



IBIDEN Mexico, S.A. de C.V. (SiC-DPF)

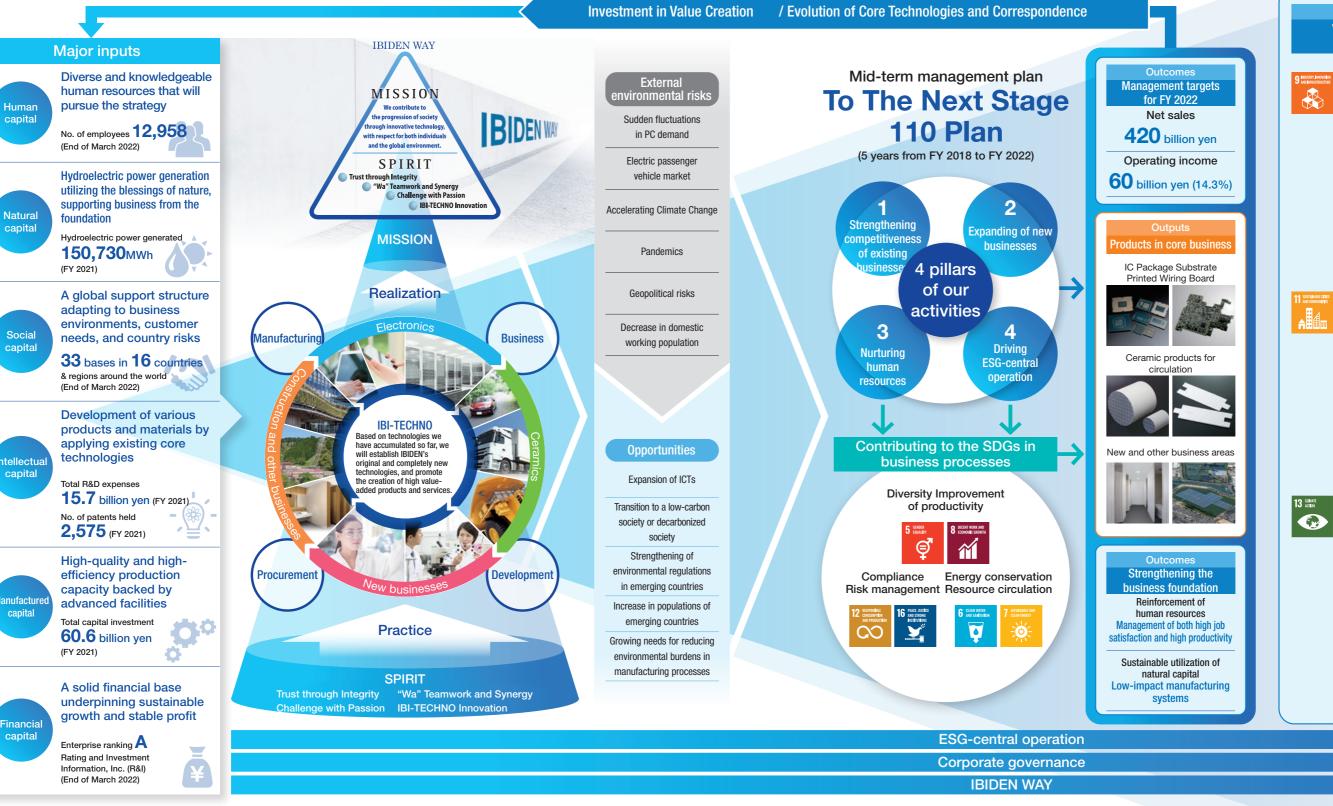


**IBIDEN Fine Ceramics** (Suzhou) Co., Ltd. (Substrate Holding Mat)

# Value Creation Story

# We will realize sustainable value creation through innovating "IBI-TECHNO", with respect for both "individuals" and "the global environment".

Our company, which was founded as a hydroelectric power generation company intended to promote the regional economy, has long valued people and the global environment, and as a technology development company has contributed to society's development with its state -of-the art technologies. From now, we will also continue to take up challenges in new value creation by continuously innovating "IBI-TECHNO," which is to develop new technologies by evolving and uniting our original technologies.



# Outcome Value that IBIDEN offers to society

#### Innovating and Disseminating ICT

IBIDEN utilizes its high-function and fine IC package substrates and printed wiring boards to contribute to the evolution of digital technology.



#### Reduction Environmental Burdens

IBIDEN utilizes its exhaust gas purification ceramic filters to contribute to the control of air pollution



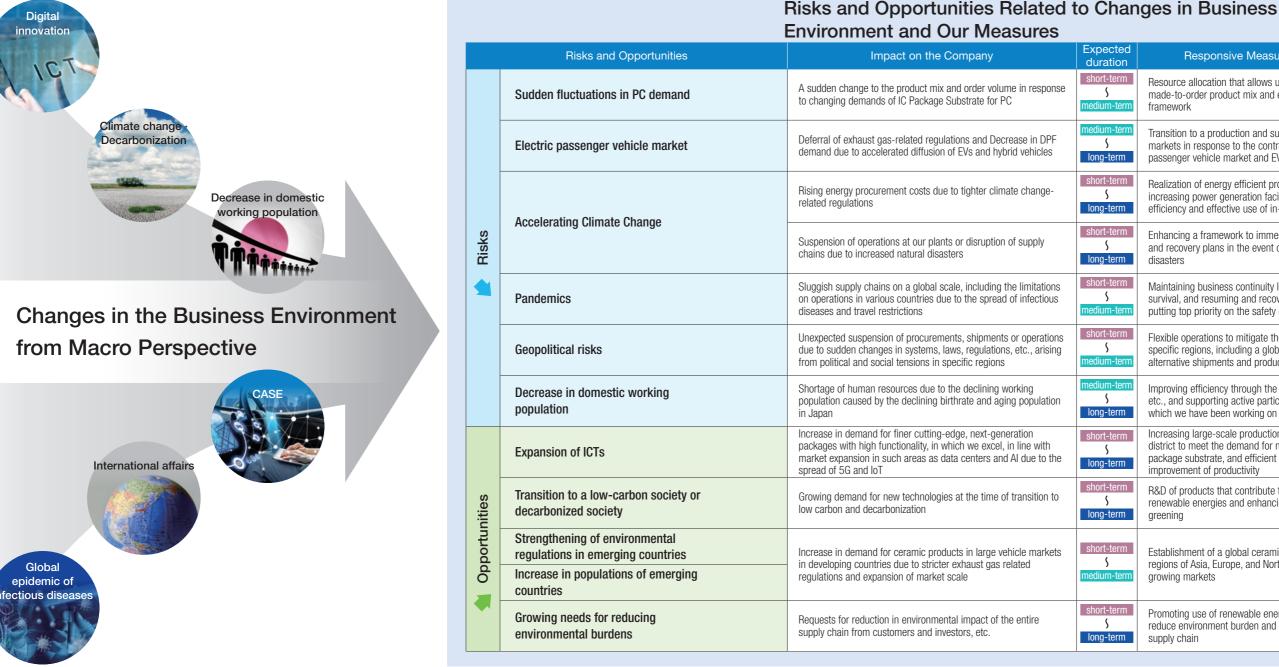
#### Mitigating Climate Change

IBIDEN applies the existing technologies for circulation in a low-carbon society or decarbonized society to contribute to the dissemination of high-insulation materials and renewable energy.



# Changes in Business Environment and Medium- to Long-Term Management Strategy

For more than a century, we have continued to grow by quickly perceiving changes in the environment and responding to them. We have recognized risks and opportunities and the impact they have, based on sudden changes in the external environment and business results and issues accumulated from the past, and are addressing highly important issues under the Management Strategy.



Issues recognized in the previous medium-term management plan

Electronics

Ceramics

- Mitigate high dependency on specific large-scale users. Select and concentrate on manufacturing structures and product lineups in response to changes in the market.
- Develop products with new materials that can support weight reduction and comfort toward the proliferation of EVs.

Incorporating into the medium-to-long term growth strategy

Key issues recognized by assessing the impact of risks and opportunities are being addressed under the medium-term management plan and ESG/SDGs initiatives.

**Medium-Term** Management Plan

ESG and SDGs Initiatives

# **Responsive Measures for Specific Impact**

Resource allocation that allows us to respond flexibly to a change in made-to-order product mix and establishment of production framework

Transition to a production and supply structure focused on growth markets in response to the contraction of the European diesel passenger vehicle market and EV product development

Realization of energy efficient production processes, including increasing power generation facilities with high power generation efficiency and effective use of in-house-generated renewable energy

Enhancing a framework to immediately implement business continuity and recovery plans in the event of local disasters due to natural disasters

Maintaining business continuity levels that are essential to corporate survival, and resuming and recovering operations systematically while putting top priority on the safety of employees and communities

Flexible operations to mitigate the impact of unexpected events in specific regions, including a global production structure, and alternative shipments and production by leveraging its network

Improving efficiency through the use of digital technologies (via DX), etc., and supporting active participation of diverse human resources which we have been working on

Increasing large-scale production capacity centered on the Ogaki district to meet the demand for next-generation high-function IC package substrate, and efficient production through DX and improvement of productivity

R&D of products that contribute to carbon capture and fixation, use of renewable energies and enhancing businesses that contribute to greening

Establishment of a global ceramic product supply system in the three regions of Asia, Europe, and North America to meet demand in growing markets

Promoting use of renewable energy and introducing technologies to reduce environment burden and improvement activities throughout the supply chain

P21-26 Message from the President

P06 Co-Creation of Value with Society P36-38 Harmony with Nature

# Message from the President

# THE FIRST CENTURY OF IBIDEN from the origin to the future



We will aim for medium- to long-term growth by fully drawing out the strengths of diverse human resources while keeping an eye on changes in the social and business environments.

President&CEO

# Takeshi Aoki

Responding to changes in the social environment—IBIDEN's purpose

# Based on the spirit of the IBIDEN WAY, cultivated since the company's founding, we will seek to solve social issues through our businesses

Unsettled times still continue in the world today. Natural disasters are occurring with frequency, and the pandemic is posing prolonged consequences. In addition, geopolitical risk is becoming more evident and having a serious effect on various situations. In terms of the environment surrounding our business, uncertainty and opaqueness are also expected to continue including the movement of the Ukraine situation and high energy prices, in addition to the impact of another wave of COVID-19 infections on economic activities. On the other hand, in pursuit of a sustainable society, global trends for the future, such as green transformation (GX) and digital transformation (DX), are accelerating. Amid such circumstances, the role to be played by companies is becoming ever larger.

Going forward, the social environment is expected to undergo various changes toward a sustainable society. Up to now, the Group has been growing by quickly detecting the demands of the world as the social environment changes, utilizing its core technologies to respond flexibly, thereby fulfilling its social responsibilities. The world's guidepost for building a sustainable society is consolidated in the SDGs. The Group, too, has identified the key issues that it should specifically address to fulfill its social responsibilities and contribute to the SDGs (see p.6 Co-Creation of Value with Society). To achieve digital innovation in our mainstay Electronics Operation, we will contribute to building a technological and industrial foundation by evolving the technology for and providing a steady supply of IC package substrates (PKG). In the Ceramics Operation, we will contribute to creating sustainable cities and communities through the development and supply of products that reduce air pollutants as close as is possible to zero.

The Group will "contribute to the progression of society through innovative technology, with respect for both individuals and the global environment." Based on this spirit of the IBIDEN WAY, cultivated since our foundation, we will contribute to solving social issues through our businesses in this way. We recognize that IBIDEN's purpose is to address the SDGs as society changes and contribute to them through our businesses in a bid to build a sustainable society. Progress with the medium-term management plan and toward achieving our targets for the plan's final year

The operating income target of the medium-term management plan was achieved ahead of schedule with the increased net sales of high-value-added products in the Electronics Operation.

The current five-year medium-term management plan "To The Next Stage 110 Plan" was formulated in FY2018. The fourth year of this plan was completed in FY2021. We will work to achieve the targets of the final year of the plan by proactively allocating management resources into growing markets based on human resources development, and working on measures for the realization of stable growth by increasing the competitiveness of our existing businesses along with expanding new businesses. Furthermore, to become a company that is trusted by all stakeholders, we will also actively engage in ESG (environmental, social, and governance) management.

The FY2021 net sales and operating income targets were ¥380 billion and ¥45 billion, respectively. However, the results exceeded the plan and the fiscal year ended with net sales of ¥401.1 billion and an operating income



of ¥70.8 billion. Particularly on the earnings front, we achieved significant growth by increasing the proportion of high-value-added products primarily for cutting-edge high-performance servers. This resulted in record performance in the electronics segment, and we were able to achieve the 60 billion target for the final year of the five-year medium-term management plan one year ahead of schedule. The operating income ratio improved from 11.9% in FY2020 to 17.7% in FY2021. This demonstrates that we are successfully forming a foundation for generating high earnings in line with growth.

As for the market of the Electronics Operation for FY2022, although the demand for personal computers in conjunction with the spread of expansion of remote work and online education will run its course, demand for high-performance IC package substrates for servers is expected to continue increasing due to the expansion of the data center market resulting from the further development of DX and emergence of new fields such as metaverse, AR and VR, and automotive CASE technology. We will strive to increase our market share in state-of-the art fields, which are among IBIDEN's strengths, through the construction of a plant for cutting-edge IC package substrates at the Gama Plant as planned. Taking a flexible response to changes in business environment and the effective use of managerial resources into consideration, we will select the manufacturing systems and product lineup, which we should focus on.

# Message from the President

In the Ceramics Operation, the mainstay DPF and AFP Operations both in the automotive field are expected to see the trend toward electrification and de-dieselification being accelerated in the passenger car market. Under this situation, we are going to establish a system whereby we can generate stable revenue over the medium to long term by taking advantage of recovery from the global shortage of semiconductors and by ensuring demand for products for heavy commercial vehicles, which is expected to increase on the back of stricter emission regulations, especially in China and emerging countries. In the FGM Operation, we take advantage of the global increase in demand for semiconductors, establish a system to increase production in the manufacturing site in South Korea, and ensure demand in growing markets so that the Ceramics Operation as a whole can stay on a stable growth trajectory.

In the Other Operations, we will ensure that they will grow as the third pillar of revenue following the Electronics and Ceramics Operations by expanding business with products featuring each domestic company's unique competitive edge, as well as by enjoying stable earnings from the electric power business.

In terms of initiatives toward the development of technology for a new market, we will narrow down the

areas of development to the following three fields: the electronics field, the new energy vehicle (NEV) field, and the new field including decarbonization technology. In the electronics field, we will develop next-generation and other future-generation IC package substrate technology. In the NEV field, we will develop a new lineup of products that respond to the electrification of the automobile market. In the new field, we will leverage the core technologies that we have cultivated up to now toward the new needs of society, such as decarbonization and green transformation (GX). Our R&D sections, each business section, and affiliated companies will collaborate in development. The Group's technologies will continue to be applied going forward to create new products that can contribute to solving social issues.

FY2022 will be the final year of the five-year mediumterm management plan. As mentioned earlier, with a focus on the Electronics Operation, we are currently continuing to make massive investments in such a way that meets the needs of society and customer requests. However, we will secure profits by increasing the proportion of highvalue-added products mainly for state-of-the-art, highperformance servers. This will allow us to maintain a high level of EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization), a source of investment



recovery, thereby ensuring the recovery of the large-scale capital investments. Furthermore, in September 2021, we made the decision to acquire land for a new plant in Ono-cho, Ibi-gun, Gifu Prefecture. The new plant scheduled to be built is expected to become our biggest production site in Japan. Under the concept of selection and concentration, we will continue to make prioritized use of management resources in areas where growth can be expected for the future. By doing so, we will finish off creating a well-balanced business portfolio primarily consisting of high value-added business and business in the growth area during the period for the current mediumterm management plan, and we will aim to realize sustainable growth, which lies ahead of it.

# Developing human resources as a growth driver

# To draw out the maximum strengths of diverse human resources, we are committed to developing them not only in Japan but also overseas.

It is individuals who support the growth strategies we implement. Contained in our mission under the IBIDEN WAY that we succeeded from our predecessors is the phrase "with respect for both individuals and the global environment." We have always recognized that individuals who work hard to achieve high goals are a major source of our survival and growth. The growth of IBIDEN is not possible without the active role played by diverse human resources. Investment is mainly made within Japan for building new plants. However, Japan is a nation with a dwindling birthrate and aging population. As such, the recruitment and development of the diverse human resources as a driver of the dramatic business expansion and competitiveness is a critical issue. We need to promote this as part of our business strategy.

To create an environment where diverse employees can play an active role and advance their careers, we have historically hired a variety of employees from not just Japan but also around the world. In Japan, we have been strengthening recruitment that assumes the utilization of a wide range of personnel, new graduates and mid-career recruits alike. We have also been undertaking the enrichment of systems that enable diverse human resources, such as women, older individuals, persons with disabilities, and foreign nationals, to play an active role. It includes systems related to maintaining a good work-life balance. Overseas, we promote localization, such as the appointment of locally hired employees as executives. To ensure that diverse human resources will remain highly motivated, we are also undertaking awareness-building at the workplace, which is leading to an increase in the number of women in management, men who take childcare leave, and other results (see p.39 Human Resources Development).

In particular, the Electronics Operation is also promoting active participation from a global standpoint by actively promoting personnel exchange. Employees from IBIDEN Philippines, Inc.-the overseas Group base for the business-are being accepted in Japan under the government's Technical Intern Program. This allows overseas human resources to accumulate skills and knowledge while supporting expansion of IBIDEN's operations in Japan. The acquired skills are then taken back with them and used to help the overseas site achieve growth. The created flow of skills contributes to the activation of personnel in the Group overall. To support this, the Human Resources Development Center was integrated into the human resources department. Integrated education, from the training of new recruits to training on shared and specialized skills, is being carried out under a human resources development system that supports business strategies and manufacturing.

# DX and GX strategies integrated with the business strategy

Going forward, we will try to transform our business model by actively promoting DX and GX to enable further business expansion

We are confident that in addition to drawing out the maximum strengths of diverse human resources, realizing digital transformation (DX) at IBIDEN will increase manyfold the results and value achieved by each individual. We will utilize digital technologies and reform our business model and how we go about manufacturing, development, and other matters. We are reforming our business model into one that will efficiently and effectively create value.

Through activities to improve each section within IBIDEN and the launch of new plants, we will undertake employee awareness building and the deepening of knowledge in relation to DX. The aim is to go beyond more than the strengthening of productivity and competitiveness, and transform the operations themselves. For example, by centralizing various information, such as those related to equipment, quality, and product flow, we will speed up data driven decision making as well as accelerate innovation in manufacturing processes and quality levels. Furthermore, functionalitywise, we will go beyond improvements through digitization. We will transform development operations, such as by implementing simulations and practical tests

# Message from the President

utilizing digital twins. We will also achieve innovation and transformation of organizations and mechanisms at other functional divisions.

To promote and enable integrated management of company-wide DX, in April 2022 we created the DX Promotion Management Division within the Strategic Corporate Planning Operations. Furthermore, with the dramatic improvement of the productivity and function of next-generation technology and products at the existing and new plants of the Electronics Operation as the objective, we also created the DX Promotion Division within the PKG Operation. With the expansion in production scale through large-scale investment, we are currently creating a concrete next-generation manufacturing mechanism that utilizes digital technology. At the same time, we are currently working to realize the optimal utilization of management resources and maximization of production efficiency by preparing and introducing a digital platform shared by the whole company for the use of digital data.

IBIDEN is promoting a growth strategy focused on the Electronics Operation. We are seeing the surfacing of risk elements, such as the escalating price of raw materials and energy caused by climate change policies and geopolitical impacts. At present there is no major negative effect on operations. However, these risks need to be addressed in implementing future growth strategies.

IBIDEN has its beginnings in hydroelectric power generation, which makes use of natural energy sources. We express the importance of valuing the global environment and enabling our operations to coexist with the global environment. In promoting our operations while utilizing energy and natural resources as natural capital, it is important that both risks and opportunities are addressed as we enhance our competitiveness. We are actively promoting green transformation (GX) as a business strategy as we seek decarbonization and other measures for the coexistence of our operations and the global environment.

In regard to GX promotion, we established the GX Promotion Division as a dedicated company-wide department and have been carrying out activities to contribute to a decarbonized society. To promote the reduction of greenhouse gas emissions across the IBIDEN Group in line with the business strategy, the heads of facility management unit in business sections serve concurrently as members of the GX Promotion Unit. As such, we have built a structure that is an integral part for the future expansion and transformation of our operations. For a decarbonized society, we have established the following as our ultimate target: "Realize net zero greenhouse gas emissions as early as possible in the 2040s." To achieve this, we have also established the following as a medium-term milestone target for FY2030: "Decrease emission intensity by half, and reduce the total amount of emissions by 30% (as compared to FY2017)."

Toward achievement of the targets, we are currently promoting introduction of such measures as the use of renewable energy, including solar, biomass, and small hydroelectric power; low-carbon energy, such as highly efficient cogeneration systems; and innovative production technology. For further reductions, it is important to carry out carbon footprinting to understand where there is a large carbon impact. First, in January 2022, we introduced internal carbon pricing. A carbon price was set up inhouse, and when making capital expenditure, the effect of carbon was visualized as part of the future cost, and operation that assumes future decarbonization was begun. By visualizing the impact of CO<sub>2</sub> emission amounts, it makes it possible for each employee to undertake innovation from conventional procedures, leading to promotion of emissions reduction.

With the new wing of Gama Plant scheduled for completion in the second half of FY2023, we will aim to maximize production efficiency through the utilization of digital technologies. At the same time, we will achieve the minimization of energy consumption and CO2 emissions through the development and selection of equipment with low environmental loads. By doing so, we plan to create a smart factory that embodies the DX and GX that IBIDEN is aiming for. Furthermore, while our efforts are currently focused on the reduction of in-house emissions in line with our business strategy, we will also cooperate with our business partners in the promotion of future activities so that we may achieve decarbonization throughout our supply chain.

# Toward the next medium-term management plan

We will make a dramatic leap as the "New IBIDEN" while responding to a harsh business environment, including climate change and changes in the social landscape

In 2022, we will mark our milestone 110th anniversary since its founding. IBIDEN launched its operations in Ogaki City in Gifu Prefecture. Under the thinking that contributing to the regional community is one of our corporate social responsibilities, we have been engaging in operations rooted in the community. Today, we are unfolding our operations around the world. Our growth would not have been possible without the help of the stakeholders surrounding us. IBIDEN's original business was hydroelectric power generation utilizing the current of the Ibi River. Since then, we leveraged in-house core technologies in accordance with changes in the social landscape and needs, and evolved our operations to our



current mainstay Electronics and Ceramics Operations. For more than 100 years, IBIDEN has been utilizing nature's blessings to shift and achieve growth of our business portfolio in accordance with changes in the social environment. While the social landscape will become increasingly harsh in the future, our attitude of growing our business while treasuring natural bounties and making a contribution to society will remain unchanged. In regard to the SDGs that the world needs to achieve by 2030, we will continue to contribute through our technologies.

Since being listed on the Tokyo Stock Exchange (TSE) in 1949, IBIDEN has been giving its attention to shareholders and investors in the capital market. With the restructuring of the TSE market in April 2022, we made the choice to be listed on the Prime Market. This market segment will be under the even greater scrutiny of global shareholders and investors. Even before now, we have been strengthening and reforming our corporate governance structure, which serves as the foundation that supports the making of swift and decisive management judgements (see p.45 Corporate Governance). This is to ensure that our operational activities are trusted, when compared with global standards. Following changes to institutional design and streamlining the executive structure, from FY2022, we executed the delegation of authority to the executive divisions and reformed the internal decision-making process with focus on streamlining the system for requesting approval. Going

forward, we will review the governance system as needed in accordance with changes in the business and social environments and endeavor to develop an appropriate system.

FY 2022 is the final year of the five-year medium-term management plan "To The Next Stage 110 Plan." The new five-year medium-term management plan will commence in FY2023. Under this new medium-term management plan, the Electronics Operation-in which investments were made actively under the current medium-term management plan-is projected to achieve further growth. With stable growth and the development of new next-generation products also expected to progress, the Ceramics Operation is expected to achieve significant results. We will realize the depiction of our dramatic leap as the new IBIDEN. On the other hand, IBIDEN's business environment, including climate change and social landscape, will be even harder to predict going forward. The IBIDEN WAY is our purpose as well as the source of the strength that has enabled us to overcome and survive difficulties. Employees will once again together share the IBIDEN WAY and we will overcome the harsh business environment. To solve crucial social issues, we will continue to provide new value to customers, employees, the regional community, shareholders, and other stakeholders, through our business activities and technologies. We will contribute in such ways to achievement of a sustainable society.

# **Financial Strategy**

# / Financial base

The Group is working to further solidify its financial base with the aim to achieve sustainable growth and generate stable profit in implementing the medium-term management plan "To The Next Stage 110 Plan," which started in FY2018.

Our mainstay Electronics Operation, serving as a driving force to achieve targets under the medium-term management plan, is in an industry with large market fluctuations. To respond to such volatility, we need a solid

Target financial ratios

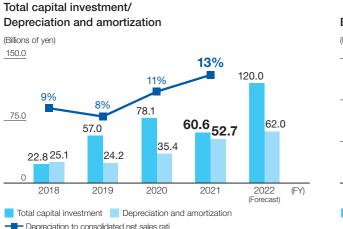


# / Progress with the medium-term management plan

The Group has grown by adapting technologies derived from core technologies to meet the needs of customers and society and by making aggressive capital investments in growing markets.

Currently, we are focusing our capital investment on the Electronics Operation. Along this line, two large-scale investments have already been made at the Ogaki Central Plant: Phase 1 investment of ¥70 billion decided in November 2018 and Phase 2 investment of ¥60 billion decided in April 2020.

We will continue to expand the Group's operations and improve profitability for greater shareholder value. Specifically,



for the purpose of increasing production capacity for IC package substrates, which are expected to see further growth in demand, we announced in April 2021 the construction of a new plant costing a total of ¥180 billion at the Gama Plant, and in September 2021 the acquisition of a new industrial site in Ono-cho, Ibi-gun, Gifu Prefecture.

financial base so that we can generate profit while

single A rating assigned by Rating and Investment

Information, Inc. (R&I) to secure flexible financing.

Specifically, we will maintain an ROE as an earning

power of capital of at least 10% while targeting to achieve

a 60% equity ratio in the medium term, which is currently

in the 50's percentage range. Furthermore, we will retain a

maintaining a high equity ratio.

While these large-scale investments slightly lowered the equity ratio, which nevertheless remained in the 50's percentage range, the successful rollout of Phase 1 and Phase 2 investments is helping establish a structure that leads to higher profitability. As a result, ROE rose from 8.8% in FY2020 to 12.1% in FY2021.



Going forward, the burden of depreciation associated with capital investment is expected to increase. However, we will secure profits by increasing the proportion of high-value-added products mainly for state-of-the-art, high-performance servers. This will allow us to maintain a high level of EBITDA (Earnings Before Interest, Taxes,

# / Shareholder returns

Currently, our profitability is improving due to the effects of aggressive capital investment to strengthen competitiveness mainly in the Electronics Operation as well as the progress in improving operational efficiency and the structural reform.

In a bid to ensure capturing the strong demand that will further expand in the future, our approach to capital allocation for the time being will be to prioritize capital investment for IC package substrates in preparation for business expansion.

For shareholder returns, we comprehensively examine the balance between retaining sufficient earnings for investment in the business and long-term steady dividend payments to shareholders. The annual dividend per share for FY2021 was ¥40, an increase of ¥5 from FY2020. We also maintain our policy of paying stable dividends in FY2022.

# / R&D activities

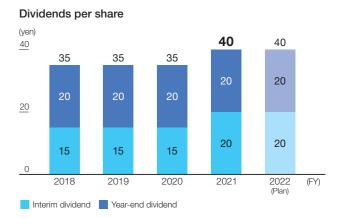
The Group's R&D activities are widely conducted by the Company's R&D sections and production technology sections as core functions, as well as technology sections of each Operation and subsidiaries and associates.

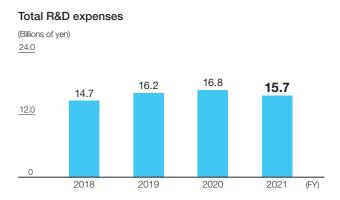
The R&D sections have built a business development system incorporating multiple functions to quickly identify customers' future needs and social issues and link them to commercialization. In addition to deepening the existing core technologies, they also explore business opportunities in new technology areas.

The production technology sections consistently engage in providing support for further improving productivity and quality by leveraging DX, and developing new construction methods and facilities.



Depreciation and Amortization), a source of investment recovery, thereby minimizing the investment recovery risk resulting from the large-scale capital investments.





# Growth Strategies for Operations | Electronics





Koji KAWASHIMA Shinji MIYAZAKI

President of PKG Operation President of MLB Operation

# **Business Environment**

# Risks and Opportunities

| Risks                           | s and Opportunities                     | Impact on the Company  |  |  |
|---------------------------------|---|--|--|--|
| Risks                           | Sudden fluctuations in PC demand        | A sudden change to the product mix and order volume in response to changing demands of IC Package Substrate for PC   |  |  |
| RISKS                           | Decrease in domestic working population | Shortage of human resources due to the declining working population caused by the declining birthrate and aging population in Japan  |  |  |
| Opportunities Expansion of ICTs |   | Increase in demand for finer cutting-edge, next-generation packages with<br>high functionality, in which we excel, in line with market expansion in such<br>areas as data centers and AI due to the spread of 5G and IoT |  |  |

# Market Trends

Forecast Stable Trend for Midto-Long Term after Temporary Decline Due to Reflecting Peaking-Out in Demand for Remote Work, Online Education and OS Updates

Market of PC

# Market of Data Center\*

Expect Return to a Stable Growth Trajectory from 2022 through Accelerated Digitization and Cloud Transformation in **Business Activities** 

Market of High-end Smartphone

Expect Modest Growth with Full-Fledged 5G Promotion

#### % Note: Further upsizing, multi-layering and fine patterning are expected in high-performance IC package substrates, in which we excel.

# Our Strengths

|             | -   |  |
|-------------|---|--|
| (A)         | Technologies  | IC packaging substrate featuring high-functionality and high-reliability as well as<br>high-function and high density printed wiring boards, which are realized by<br>multilayering, refined wiring, and miniaturization through the multi-year experience |
| if the sub- | Trusted relationship with customers                 | Sharing the future roadmap with the world's leading customers  |
| Lun         | Manufacturing<br>structure to meet<br>strong demand | Aggressive investment on an unprecedented scale to increase high-quality,<br>highefficiency production capacity through the introduction of cutting-edge<br>equipment  |

# Contributing to society through our businesses

Ratio of net sales

by operation **59.1**%

Diffusion of information technology has a great potential to enrich people's lives further. Information and our daily lives are becoming more closely interconnected, and access to information communication technology (ICTs) are gaining more importance around the world.

**IBIDEN's Electronics Operation supports** communication technology such as data centers with highly functional and highly reliable IC package substrates and contributes to the realization of digital innovation of the world.

# **Growth Strategy**

Although demand for personal computers in conjunction with the spread of expansion of remote work and online education will run its course, demand for high-performance IC package substrates for servers is expected to continue increasing due to the expansion of the data center market resulting from the further development of DX and emergence of new fields such as metaverse, AR and VR, and automotive CASE technology.

# **Results for FY2021 and Forecasts for FY2022**

# IC Package Substrates (PKG) Operation

Both net sales and operating income rose from the previous fiscal year because demand for PKG for PCs remained firm, Phase 1 investment enabled Ogaki Central Plant to continue to achieve stable mass production, and Phase 2 investment enabled it to go into mass production from the third quarter as planned.

# Motherboard and Printed Wiring Board (MLB) Operation

Both net sales and operating income rose from the previous fiscal year because the sales of modular substrates remained strong despite a decline in the sales to certain Chinese smartphone makers.

# TOPICS

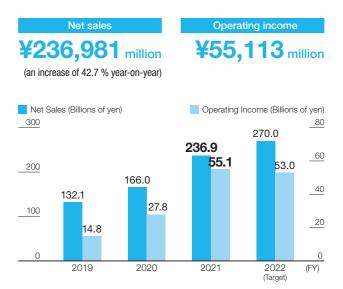
# Performed a groundbreaking ceremony for a new building of Gama Plant for high-performance IC package substrates

On April 15, 2022, we held a groundbreaking ceremony for a new building at Gama Plant as part of the investment to increase the production capacity of high-performance IC package substrates, which was announced on April 27, 2021. The new building is scheduled to be completed in the second half of FY2023. The building will serve as a smart factory that enables more efficient production of high-performance IC package substrates with use of state-of-the-art DX technology. It is one of the pillars of our next medium-term management plan, starting from FY2023. We will ensure the safety in construction of the building with the understanding and cooperation of the community residents and parties concerned.

# Announced acquisition of an industrial site in Ono-cho, Ibi-gun, Gifu Prefecture

On September 10, 2021, we entered into an agreement with Ono-cho for acquisition of an industrial site, with an eye to increase production capacity for high-performance IC package substrates, whose market is poised for strong growth. In addition to aiming for stable growth of business in the medium to long term, we will keep contributing to the Ono-Godo Interchange District Community Development Project promoted by Ono-cho.

We will strive to increase our market share in stateof-the art fields, which are among IBIDEN's strengths, through the construction of a plant for cutting-edge IC package substrates at the Gama Plant as planned. Taking a flexible response to changes in business environment and the effective use of managerial resources into consideration, we will select the manufacturing systems and product lineup, which we should focus on.





Gama Plant after new construction (architectural illustration)



Agreement Signing Ceremony with Ono-cho, Ibi-gun, Gifu Prefecture

# Growth Strategies for Operations | Ceramics



President of Ceramics Operation Norihiko YAMAMURA

# Contributing to society through our businesses

Aiming to create towns where people can continue to live their lives for generations, we must minimize the negative effects that our lives and activities have on the environment.



Ratio of net sales

by operation **22.6**%

Currently, many countries are introducing tighter environmental regulations across the world, and the entire industrial world needs to contribute to the creation of a cleaner environment.

IBIDEN's Ceramics Operation contributes to the improvement of air quality across the world through provision of diesel particulate filters (DPF) that purify exhaust gas and substrate holding mats (AFP).

In the Graphite Specialty (FGM) Operation, we will support communication technology and contribute to the realization of digital innovation primarily through supplying materials for semiconductor manufacturing equipment.

# **Business Environment**

# Risks and Opportunities

| Risks         | s and Opportunities  | Impact on the Company  |  |  |
|---------------|--|--|--|--|
| Risks         | Electric passenger vehicle<br>market                                   | Deferral of exhaust gas-related regulations and Decrease in DPF demand due to accelerated diffusion of EVs and hybrid vehicles               |  |  |
| Opportunities | Strengthening of<br>environmental regulations<br>in emerging countries | Increase in demand for ceramic products in large vehicle markets in developing countries due to stricter exhaust gas related regulations and |  |  |
|               | Increase in populations of<br>emerging countries                       | expansion of market scale  |  |  |

#### Market Trends

### Passenger Car Market

# Medium & Heavy Commercial Vehicle Market

Prospect Accelerated Electromobility. Maintaining Constant Level of Vehicles with Internal Combustion Engines

Expand Market against Background of Emission Control in China and **Emerging Countries** 

#### Our Strengths

| <sup>ي</sup> | Technologies                        | Unique ceramics technologies driven by high-temperature sintering technology |
|--------------|-------------------------------------|--|
|              | Trusted relationship with customers | Sharing the future roadmap with the world's leading customers                |
| luy          | Global manufacturing system         | Supply system in the three regions of Japan (Asia), Europe and North America |

# **Growth Strategy**

In the DPF Operation, while the trend toward dedieselification and electrification is expected to accelerate in the passenger car market, we are going to establish a system whereby we can generate stable revenue over the medium to long term by taking advantage of recovery from the global shortage of semiconductors and by ensuring demand for products for heavy commercial vehicles, which is expected to increase on the back of stricter emission regulations, especially in China and emerging countries.

In the AFP Operation, we will maintain a stable mass production at IBIDEN Fine Ceramics (Suzhou) Co., Ltd.

# Results for FY2021 and Forecasts for FY2022

### Diesel particulate filters (DPF)

Net sales declined from the previous fiscal year as a result of the accelerated electrification mainly in the passenger vehicles amid the global trend toward decarbonization as well as a decrease in production of automobiles due to the semiconductor shortage. Operating income increased from the previous fiscal year as a result of improving productivity of high-function products and refocusing our sales efforts to increase orders for products for heavy commercial vehicles.

# Substrate holding mats (AFP)

Both net sales and operating income stayed at the same level as the previous fiscal year as a result of launching a new plant of IBIDEN Fine Ceramics (Suzhou) Co., Ltd. as planned to capture demand in the Chinese market despite some negative impact of a decrease in the whole automobile market as well in the DPF Operation.

# Graphite Specialty (FGM)

Both net sales and operating income increased from the previous fiscal year thanks to strong sales of products for semiconductor manufacturing equipment amid the global surge in demand for semiconductors.

# TOPICS

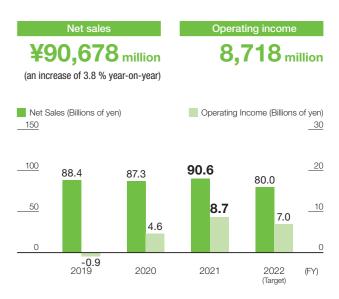
# Mass production commenced ahead of schedule at a new manufacturing plant in China

In May 2021, IBIDEN Fine Ceramics (Suzhou) Co., Ltd. started mass production ahead of schedule. It was established in April 2020 as our third integrated manufacturing plant following Kinuura Plant and IBIDEN Hungary Kft. The mass production ahead of schedule was enabled by the efforts of the employees in Suzhou and Japan as a team in installation of equipment and training by using digital tools while overcoming constraints amid the COVID-19 pandemic. A Chinese emission control enacted across the nation from 2021 is tighter than the existing European regulation. We expect the Chinese regulation will help boost demand of the high-functional sealing materials for the passenger vehicles, buses and trucks, despite the trend towards electrification. We will enhance our production capacity and customer support in China, the world's

largest automobile market.

and ensure demand for heavy commercial vehicles and other products in the growing Chinese market so that the Ceramics Operation as a whole can stay on a stable growth trajectory.

In the FGM Operation, we take advantage of the global increase in demand for semiconductors, establish a system to increase production in the manufacturing site in South Korea, and ensure demand in growing markets so that the Ceramics Operation as a whole can stay on a stable growth trajectory.





IBIDEN Fine Ceramics (Suzhou) Co. 1 td





President of R&D Operation Sotaro ITO

# Contributing to society through our businesses

Social environment is exposed to rapid changes brought about, for example, by the advancement in digital technology and the increase in the global demand for decarbonization. Accordingly, issues affecting the whole society are becoming more evident, including those set out in SDGs. IBIDEN gives priority to contributing to the advancement of society by identifying social needs and changes in the global market, and leveraging our innovative technology to promptly commercialize products that solve such issues.



Driven by our corporate DNA of "creating what will be needed by the society in the future based on our cultivated core technologies," we have accumulated knowledge, research, and data as the source of our competitiveness. We will guickly achieve successful commercialization through efficient development by fully utilizing information we have accumulated and digital technologies and through covering missing parts with stronger collaboration with industry, academia and government.

# **Challenges in New Business Fields**

Our R&D is aimed at contributing to SDGs by helping resolve social issues as required by the society.

In the electronics field, where the technology is key to supporting progress of digital technology, we are developing next-generation IC package substrates and new packaging technology further ahead of the nextgeneration substrates. Toward the digital innovation, we will contribute to building infrastructure for industry and technological innovation by constantly evolving our own technologies.

In the Ceramics Operation, we are developing and advancing commercialization of products such as electric vehicle components in the NEV (new energy vehicle) field amid significant changes in the market toward a decarbonized society.

Furthermore, we are developing and commercializing products that contribute to solving social issues in new

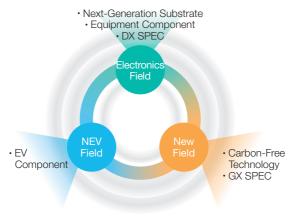
# Intellectual Property Strategy

As a technology development-oriented company that has created new value from its core technologies cultivated over its long history, we consider the intellectual property strategy to be crucial to ensure our technological competitive advantage.

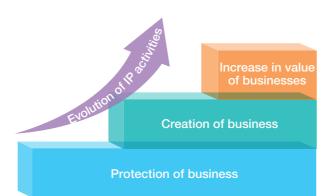
The basic strategy focuses on protection of our business. We will promote acquisition of IP rights on our core technologies to maintain our products' competitiveness by building a network of patents for our business and products, while avoiding infringement of our competitors' patents. Specifically, we aim to build a higher barrier to entry and a more competitive advantage of our business, particularly by increasing applications of core patents on our differentiated technologies.

At the same time, we will analyze and utilize patent information to provide information useful for formulating business and R&D policies and making relevant decisions, which may lead to creating businesses. Furthermore, we

fields such as carbon recycling based on the green transformation (GX) technology to respond to climate change, and bio-business that contributes to environment conservation and food crisis.



will perform value analysis of our patents and products, whereby we will ensure highly profitable IP rights leading to competitive advantage of our business. In this way, we will evolve our IP activities so that they can contribute to enhancing the value of businesses.



# System to Bridge R&D and Commercialization

Driven by our corporate DNA of "creating what will be needed by the society in the future based on our cultivated core technologies, we engage in development activities by identifying the global market and social needs and working closely in partnership with our customers. The R&D Operation currently has three business development units.

The strengths of our R&D practice lie in that we always set commercialization of products as a goal and that our knowledge, research, and data we have obtained over the years are accumulated in a way readily available to fulfill the purpose. From these accumulations, we will accelerate development through the use of digital technology and collaboration with industry, academia, and government, as well as utilizing our extensive in-house evaluation system to quickly achieve successful commercialization leading to mass production.

To develop human resources engaged in R&D, we actively support the acquisition of qualifications and encourage exchange of knowledge and insight with

Development results

#### TOPICS **NEV Field: Development of Battery Materials**

To respond to climate change, there is a growing global demand for technologies that contribute to low-carbon and decarbonization. In fact, the passenger vehicle market is shifting significantly



#### TOPICS 2 New Field: Started Sales of a Plant Activator

Agriculture is facing a number of challenges such as global demand for reducing chemical pesticides and fertilizers, unfavorable weather, an increase in natural disasters, and a shortage of labor. We have focused on these issues and worked to develop products that contribute to sustainable agriculture.

Utilizing our knowledge of organic chemistry gained through our existing business, we have developed our own naturally derived plant activator, LEAFENERGY, which supports stable growth, quality, and harvesting. We have conducted a demonstration test using this product in Yabu City in Hyogo Prefecture, with which we entered into a

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external organizations and academic institutions. In addition, we are working to develop an open-minded culture and enhance motivation by setting aside time for developers to allow themselves to think outside the box on their own initiative.





- toward electrification. We aim to contribute to solving social issues by leveraging the technologies we have cultivated in the field of ceramics to guickly commercialize products in the NEV field.
- Currently, we are developing battery components for NEVs, and from the development stage, our engineers have been working with battery manufacturers to understand the issues they face and propose technologies that will lead to solutions. As a result, we successfully developed components that contribute to battery safety in a short period of time and have started mass production at an early stage.



comprehensive partnership agreement, for the purpose of improving the agricultural productivity in semi-mountainous areas. Since the effect of LEAFENERGY was verified in this test, we have started sales all over the country.



ESG Management

Growth Strategies for Operations | Other

# Contributing to society through our businesses

# Construction

Our own and innovative technology, which is a fusion of slope facing technology and landscaping, contributes to create better symbiosis between human beings and the natural environment.

| 13 CLIMATE<br>ACTION |
|----------------------|
|                      |

# Housing Materials

To realize a safer and more secure living space, we contribute by providing highperformance products including antiviral coating material centered on melamine decorative laminates.



Ratio of net sales

by operation 18.3%

# **Growth Strategy**

We will ensure that the Other Operations will grow as the third pillar of revenue following the Electronics and Ceramics Operations by expanding business with products featuring each domestic company's unique competitive edge, as well as by enjoying stable earnings from the electric power business.

# Results for FY2021 and Forecasts for FY2022

### Construction

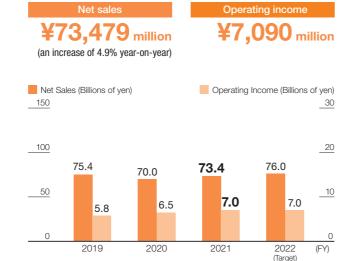
Net sales increased from the previous fiscal year due to strong orders received for construction of electrical substations and emergency power generators, and for soil analysis in the environment-related business.

#### Housing Materials

Net sales remained unchanged from the previous fiscal year due to an increase in sales of antiviral melamine decorative laminates and related materials despite some impacts of the lumber crisis such as a surge in costs of raw materials and difficulties in material procurement.

#### Other Operations

Net sales increased from the previous fiscal year due to a rise in the selling price of oil products resulting from the global increase in the price of crude oil and the strong sales of foam resin in the synthetic resin processing sector.



# TOPICS

# Rehabilitating a hydroelectric power plant deserted half a century ago

IBIDEN Engineering Co., Ltd., one of our group companies, determined to rehabilitate Kamiishizu Toki Hydroelectric Power Plant in Ogaki City that was deserted about half a century ago and held a groundbreaking ceremony in July 2022. The power plant was built with capital contributed by local residents in 1921 and sold to a private company in the lime industry but it has stopped power generation since the mining of lime stone ended in 1976. IBIDEN Engineering considers that the rehabilitation of the hydroelectric power plant is



Architect's Conception of Kamiishizu Toki Hydroelectric Power Plant

meaningful in light of promoting renewable energy. The power plant is scheduled to start operations in April 2024 after completion of the overall renovation.

Its annual energy generation will be 1.2 million kWh (equivalent to the annual power consumption of about 330 households). It is a small power plant, but the company is planning to use it as a place to learn about renewable energy and SDGs.

# Harmony with Nature

We conduct the environmental load reduction activity with all concerned people under IBIDEN way. By doing so, we strive to solve environmental challenges through our business operation and, in our capacity as a company, aggressively promote improvements in the environment for the next generation, with the ultimate goal of creating harmony with the global environment and building an enriched society.

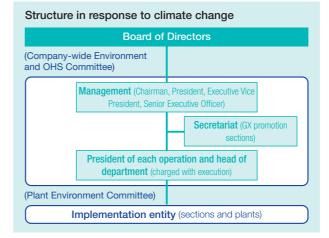


# Response to Climate Change

# Structure in response to climate change (Governance)

The risks and opportunities of climate change surrounding us and the proposed countermeasures are discussed at the Company-wide Environment and OHS Committee. Subsequently, the president of each operation is responsible for the implementation in the Company.

The director in charge of GX promotion regularly reports how the entire company plans to respond to climate change and how these plans are executed to the Board of Directors, which supervises the matter. To turn the policy into the activities in which all employees participate, the environment committee established at each plant discusses and decides on its own activities.



### Risk Management

In the company-wide risk management process, we analyze a wide variety of risks surrounding management and addresses items that will seriously impact our business. The company-wide Risk Management Committee chaired by the President & CEO is held annually to confirm material risks and decide how to respond to them including how to avoid them or how to mitigate impacts in case they occur.

The risks related to climate change are also regarded as major risks. These risks and opportunities are recognized by sections responsible for each risk category, followed by the confirmation and assessment in the appropriate meeting such as the Environment Committee and each department meeting as necessary, and then the response policy is discussed and determined.

# Strategy

To reduce environmental burden and make the globe a better place for the next generation, we set the Environmental Vision 2050 to strive for the harmony with

Financial and Corporate Data

We will contribute to the supply of renewable energy including hydroelectric power generation, which is the origin
of our business and solar power generation.

• We will reduce environmental loads from the whole supply chain by properly managing the harmful chemical

We will reduce the environmental effect within our operational process. (reduction in water usage and waste)
 We will contribute to the reduction of greenhouse gas emissions through our products and business.

nature. The response to climate change is one of our major management pillars. To strike a balance between business growth and the response to climate change, the Group will work together to innovate production technologies that enable low-carbon operations and to develop technologies contributing to a decarbonized society.

Moreover, to recognize the risks and opportunities arising from climate change properly, we assess their impact on our business strategy and conduct a scenario analysis to prepare a future business strategy. Through the scenario analysis, we try to confirm the appropriateness of our current responses while identifying prospective issues.

We identify highly important business risks and opportunities, which arise from the change in business environment due to climate change and its effects, and then respond to such risks under the medium-term management plan.



# Metrics and Targets

We set the FY2030 target for the reduction of GHG emissions to achieve our Environmental Vision 2050.

#### Target for carbon neutrality

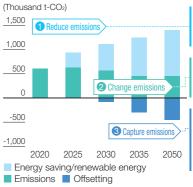
To achieve net zero GHG emissions at the earliest possible stage by 2040's.

#### Milestone targets for FY2030

To reduce total emissions by 30% and carbon intensity by 50% or more compared to FY2017.

Note: We revised the target set in FY2020.

# Basic approach to achieving net zero GHG emissions



Higher energy-efficient or less carbon-intensity technologies are to be introduced when capital expenditure such as construction of new plants is made.

Renewable energy systems including off-grid power systems and new energy that is being put in use are going to be introduced.

We try to offset the amount of carbon emission by creating emission credits through our business including technological development that contributes to carbon capture, or by buying emission credits.

# **Climate Scenario Analysis**

We announced our support for the TCFD recommendations in August 2020. Under the framework of the TCFD, we work to disclose the impact of climate change on our business. With the impact of climate change, such as the fluctuation of markets and severe disasters becoming more apparent, we conduct scenario analysis to assess and analyze the impact of climate risks and opportunities on our business.

### Reference scenario and the circumstances affecting our business (excerpt)

|                  |  | • Emergence and growth of new markets (new energy vehicles [NEVs]), high energy             |
|------------------|--|---|
|                  | Opportunities  | efficient electronic devices)   |
| Transition risks |  | Increase value of renewable energy  |
| (2°C scenario)   |  | <ul> <li>Rapid shrink of certain market (internal combustion engine)</li> </ul>             |
|                  | Risks  | Rise in the cost of energy and material procurement (carbon taxes, emission credits         |
|                  |  | trades, soaring demand for rare metals)   |
| Dhyeical ricke   |  | • Intensification of weather disasters (increasing frequency of typhoons, river and coastal |
|                  |  | flooding, extreme hot weather, heat waves)  |
| (4°C scenario)   |  | Decrease in available water resources (water scarcity and water quality changes)            |
|                  | Transition risks<br>(2°C scenario)<br>Physical risks | Risks   |

### Major risks and opportunities of climate changes on business operation

|           | Major potent   | ial impacts  | Response policies  |
|-----------|--|--|--|
|           | Fuel efficiency regulations and emission reduction po<br>electrification in the passenger vehicle market, while<br>combustion engine is mainly used, reducing demand   | dwindle the diesel market where an internal          | Demand for ceramic products has shifted from passenger vehicles to large<br>commercial vehicles. Stricter emission control will propel the demand for<br>ceramics from large vehicle market.   |
| Risks     | Introduction of carbon taxes on fossil fuel and emission<br>electricity and fuel. If the current level of energy cons<br>approx. 2,000–4,000 million yen*.             |  | In preparation for the introduction of future taxation and emission credits<br>trade, the Group sets our emission reduction target globally, controlling<br>emission from each plant.  |
|           | It is expected that extreme weather events occur more<br>Especially, increased flood risk at production sites in So  |  | The Group lays out a business continuity and recovery plan in the event of<br>natural disaster, and prepares for the facility damage in anticipation of flooding.  |
| rtunities | Tighter emission control in various countries propels<br>for decarbonization in the market. Among our related<br>power-saving servers and electrification of passenger | businesses, demand for the products that enable      | The Group makes a further capital expenditure for production increase of<br>IC package substrates catering for high-function servers. We also apply<br>the cultivated core technologies to launch new products such as those for<br>electric vehicles. |
| Onno      | The Group has three hydroelectric power generation,<br>demand for carbon-free renewable energy rises amid<br>to procure renewable energy steadily from the off-grid    | tighter emission control policies, the Group is able | To maintain high power generation capacity on an ongoing basis, the<br>Group does maintenance of the hydroelectric facilities, and conducts<br>periodical upgrade of the equipment.  |

\*Calculated from the assumed prices of the carbon tax and electricity levy if the current decarbonization policy were to be implemented, based on the current GHG emissions from fuel consumption (ca. 130-150 thousand tons) and purchased electricity consumption (approx. 1,000-1,200 GWh)

# Use of clean energy

#### Blessings from Our Ancestors with Hydroelectric **Power Generation**

Hydraulic power generation is clean energy without greenhouse gas emissions. IBIDEN has owned and operated hydraulic power generation plants since our foundation, and currently operates three facilities located at the upstream section of Ibigawa River in Gifu Prefecture (27.90MW in total). Moreover, we install solar power generation equipment in each plant to generate renewable energy.

### Contribution to Expansion of the Renewable **Energy Market by the Power Generation Business**

IBIDEN Engineering Co., Ltd., one of the Group companies, engages in the energy solution business. It has a track record in many power generation projects ranging from equipment for hydroelectric power plants and power substations to systems for solar power generation plants and small hydroelectric power plants, through an integrated approach, in which its business includes design proposal, construction and maintenance. We will continue to promote business solutions for energy problems within and beyond the Group.

Low Carbon Energy by In-house Power Generation IBIDEN employs a highly energy efficient in-house power generation gas engine cogeneration system that generates electricity and steam. We aim to establish a system whereby each plant is connected to our own power grid so that privately generated electricity can be optimally supplied in accordance with demand between each plant.



Higashi-Yokoyama Power Plant



Water floating solar power generation plant (Kinuura Plant)



ogeneration system gaki Central Plant)

# Blessing of water

A large amount of water resources is used in the manufacturing process of electronic products, particularly for cleansing. Ogaki City in Gifu Prefecture, where our domestic production bases are concentrated, is rich in underground water thanks to the Ibigawa River system. However, water shortages are a serious problem in the world today. We assess the water risks at each plant in reference to the database, such as the Aqueduct released by the World Resources Institute (WRI). Based on the assessment, IBIDEN Electronics (Beijing) Co., Ltd. is identified as a high risk site. IBIDEN Electronics (Beijing) Co., Ltd. has increased its use of recycled water discharged from the industrial park since FY2012, and water recycling rate exceeds 90% on a continuous basis.

# TOPICS

Waste management underpinning our business activities

- We strive to reduce risks relating to waste from the following three perspectives:
- 1) Compliance with laws and regulations: We established a system to promptly respond to legal amendments by changing individual contracts each plant concludes into a master agreement covering all plants.
- 2) Improving disposal costs: We are working to recycle increasing solid industrial waste by applying innovative solutions to each process from cleaning, disassembly, to sorting.
- 3) Securing treatment capacity: For the appropriate and smooth treatment of specified waste (liquid), we look for the measures to control emissions and collaborate with treatment companies.
- We work to implement waste management practices in line with our business continuously.

# **Chemical Control**

A variety of chemical substances are used in the manufacturing process in the Group. They may cause environmental pollution or pose health hazards to humans. It is a great responsibility for businesses to properly manage chemical substances to secure product safety, reduce environmental burdens, and promote occupational safety. Regarding chemical substances, the laws and regulations of each country, including the REACH Regulations and the

# **Environmental Contribution through Business and Products**

ng the GT fra

Under our mission, the Group aims to contribute to the growth of a wealthy society through our products and services that our business activities offer.

Our automobile exhaust parts contribute to realizing cleaner air by reducing air pollutants. We will continue to develop high-efficiency and high-function intake and exhaust systems based on our ceramic molding and sintering technology which aim for cleaner emissions.



Introduction



# **Resource Circulating Activities**

IBIDEN believes that it is an important responsibility of businesses to make effective use of the world's scarce resources and to take part in a global effort to conserve resources. We promote the so-called 3R activity, which consists of initiatives to Reduce, Reuse and Recycle the resources we consume. In doing so, we aim to improve the resources efficiency.

Currently, each plant and Group companies are working on sorting out and recycling wastes. Together with improved production efficiency, we set a goal of reducing the waste basic unit by 5% in our Medium-Term Management Plan.

Management of waste that increases with business expansion is critical to maintenance of our business activities.

RoHS Directive, as well as the standards demanded by our customers, are becoming increasingly stringent. To prevent risks caused by chemical substances, we are working to properly manage chemical substances throughout the entire supply chain by identifying substances whose use should be eliminated or reduced in the Green Procurement Guidelines.

The Group's associated businesses also provide products and services that reduce environmental burden, by leveraging the technologies we have accumulated.

IBIDEN Greentec Co., Ltd. continues to provide new construction methods that achieve both disaster prevention and environmental protection, such as the "Totally Green" method. IBIDEN Engineering Co., Ltd. engages in the construction and maintenance of the renewable energy facilities.



Solar power generation equipment

# Human Resource Development

Employees are the driving force that enables us to run our business and provide the public with valued service. We aim to create vibrant workplaces in which each individual employee derives a sense of satisfaction and achievement from gaining a thorough understanding of the Company's management policies and business strategies, and from having a role to play that enables each employee to contribute to both the Company and society. For the

development of human resources which is one of the pillars of our Medium-Term Management Plan, we have been implementing five measures of (1) Creation of environment in which diverse employees can play active roles as part of the work style reform to achieve a good work-life balance. (Diversity & Inclusion); (2) Productivity improvement; (3) IT utilization; (4) Human resource training system; and (5) Thorough working hour management.

# Creation of Environment in which Diverse Employees Can Play Active Roles (Diversity & Inclusion)

Our Group aims to realize a work environment and climate in which diverse human resources can exercise their individual abilities and can feel reasons for living and job satisfaction amidst a trend of advancing globalization and diversification of values

# Female Advancement

Since FY2017 when the Company launched a training program called the Action on Promotion for Women's Empowerment, we have been reforming awareness of the workplace including that of the supervisors of female employees, in addition to supporting development and promotion of female employees\*.

We consider promoting more female employees to a managerial position is crucial, and have set a mediumterm target as below. X Junior manager or higher-ranked manager

# Scope: IBIDEN Co., Ltd. April 2022 Number of female 3 24 managers Medium-term target Rate of managers among female employees: 20%

# Interaction with Overseas Employees as Technical Interns

The Company accepts employees from IBIDEN Philippines, Inc., our overseas group company, through the technical intern training program. Allowing the interns to learn stateof-the-art technologies in Japan and to bring the knowhow to their countries will help upgrade the technical levels of our overseas group companies.

We conduct programs for cross-cultural training and financial literacy as well as for Japanese language training and provide support in daily lives by the specialized staff so that overseas employees can work safely and without worry in an unfamiliar environment.

# Acquisition of Childcare Leave and other related leave by Male Employees

Due to the efforts we made to enhance and promote the worklife balance support system, more male employees are proactively participating in child rearing and becoming aware of the importance of the balance between work and personal life.

The acquisition rate of Rate of male employees taking childcare leave (statutory) and the average number of days of statutory childcare leave taken by male employees are as follows.

|   | Scop    | be: IBIDEN Co., Ltd. |
|---|---------|----------------------|
|   | FY 2020 | FY 2021              |
| Rate of male employees taking childcare leave (statutory)                         | 16.9%   | 26.4%                |
| Average number of days of<br>statutory childcare leave taken by<br>male employees | 56 days | 55 days              |



Japanese language training for technical interns



employees and high productivity. and gives priority to safety.

# Productivity Improvement and IT Utilization

We promote the use of IT technology aggressively to keep competitive advantage continuously. At Ogaki Central Plant where high-function IC package substrates are put into mass production, we use ICT to network all equipment information to maximize production efficiency, stabilize and enhance product quality, and reduce cost. Advanced data analysis driven by accumulating various data from facility abnormality to guality information and processing information helps accelerate an improvement. In addition, we create an environment that enables to keep the operation safe even in an emergency such as

# Human Resource Training System

The Company has established Systematic human resource training systems in an effort to develop the human resources necessary to accurately grasp changes in the business environment and create new products and technologies.

Specifically, we implement standardized education across the Company (stratified training programs by age group and by job grade) and provide specialized education for selected personnel based on our basic education and training structure. The training programs by age group were completely revised from life plan-based training to career plan-based training in line with changes in our times such as the extension of the mandatory retirement age to 65, while in specialized education, we opened the Human Resource Development Center in 2017. Following the integration of the Center into the Human Resources Division in April 2021, systems are in

# **Through Work Hour Management**

In Japan, rectifying the practice of long work hours has become one of the important issues to be addressed. Even though laws and regulations relating to work hours have been tightened, mental illness and occupational accidents caused by long work hours have become a serious problem, and companies are being asked to further efforts to rectify the practice.

IBIDEN and its Group companies in Japan set a goal of reducing the average annual work hours per employee to less than 2,000 hours. Based on this goal, presidents of Operations established their policies on work hours and





• We aim to realize a work environment where diverse human resources, including female employees, people with disabilities and foreign workers, can exercise their abilities, thereby creating an active corporate culture. By utilizing IT tools and taking other measures to achieve efficiency, we will realize both rewarding work for

• We will foster a corporate culture that minimizes risks for employees and negative impact on their health,

the spread of COVID-19 and cyberattacks by providing environment and robust security for tele work.



place for conducting the education of personnel capable of underpinning manufacturing operations, in a manner consistent with the company's personnel strategy.

We also focus on the development of personnel who can flourish globally by promoting not only foreign language but also cross-cultural communication training programs.



Fundamental training on facilities

heads of departments set their targets, and are tracking progress toward those targets. Measures to encourage employees to take annual paid holidays and reduce overtime are also being taken.

To make managers better able to handle the complex labor management processes, we provide them with necessary training, added a chat bot that immediately answers questions twenty-four hours a day every day on the company intranet, and make sure that all of them understand the processes.

# / Respect for Human Rights

# Respect for Worker Rights and Human Rights Education

The IBIDEN Group clarifies in the IBIDEN Standards for Employee Behavior our respect for the basic rights of workers as internationally declared and that we will not aid in the infringement of human rights including the use of any form of forced or involuntary labor or child labor.

We provide training on fair employment and human rights to those in charge of labor affairs management as well as staff members and managers in charge of hiring while striving to keep all employees well-informed on workers' rights through our Standards for Employee Behavior.

In Japan, we provide managers and employees with human rights-related training programs in efforts to prevent any form of abuse of power. Our manager training programs teach participants things they should know and practice as managers, including daily communication skills, responses when being consulted by staff members and the handling of information.

### Human Rights Due Diligence

We believe it is important to work on the issue of human rights with the entire supply chain as well as within the Group and thus conduct surveys of our direct suppliers, and cooperate and communicate with them in dealing with such issues.

We periodically undergo formal audits by the industry coalition RBA at our bases mainly for the Electronics Operation to verify the state of due diligence in the Company. To maintain the current favorable compliance rates, we will promote a daily inspections and operational improvement cycle.

# / Measures for Occupational Health and Safety

We conduct the health and safety activity done with all concerned people under IBIDEN WAY, and aim to harmonize "operation" and "health and safety" with the fundamental rule to minimize the risk that may affect the life and health of person participating to IBIDEN's operations.

### Basic activities and Specialized activities of Occupational Health and Safety

As part of the basic activities intended to develop a corporate climate in which the top priority is always placed on health & safety and compliance with laws and regulations, we have continued to engage in "Workplace Safety Circles' Activities," "Safety Patrol," and "Raising Awareness through Safety Education."

We are providing safety education in a systematic way, so that all employees can take the relevant training. The introduction of our hazard-simulation safety education has led to employees raising their safety awareness and acquiring the ability to avoid risks. We also provide employees assigned to a new workplace with overall education designed for newly appointed personnel, including health and safety education. Furthermore, we offer special education on health and safety to employees involved in hazardous operations. The Workplace Safety Circles, in which all workers working in the premises of IBIDEN participate, promote raising awareness of safety through repetitive learning of safety confirmation points in the workplace and risk prediction training.

As part of our specialized activities, we have reduced risks by assessing the equipment and operations with thorough implementation of the Operational Safety and Environment Assessment, which is a mechanism of safety design, legal compliance, and completion tests, and the Health and Safety Risk Assessment, which targets all sites.

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## Strengthening Activity for Zero Occupational Accidents

Our group aims to achieve zero serious accidents, focusing on "Reducing the number of recurrences of occupational accidents to zero," and "Preventing new occupational accidents" as pillars of our activities, we are working on occupational health and safety activities to enable all employees to work with high spirits and establish a safe and comfortable workplace across the IBIDEN Group, with employee awareness of the "Safety First" policy.

The occupational accident frequency rate of the Company and group companies in Japan stands at 0.66, which is lower than the average in the all industry throughout Japan. With a view to further reducing occupational accidents, we are making an effort to strengthen our management so as to prevent similar accidents from occurring by analyzing the causes and true reasons of past accidents, and by taking the necessary recurrence prevention measures.

#### Promoting Health and Productivity Management<sup>\*</sup>

Our group believes that the physical and mental health of each and every employee constitutes the basis for supporting the Group's competitiveness, and actively helps employees maintain good health.

Having established, as a promoting structure, the Health Subcommittee, which consists of the Health Management Promotion Center (industrial physicians, public health Nurses), Labor Union, Health Insurance Society, Environment, Health and Safety Division, Human Resources Division, and full-time staff for health promotion at plants, the Group actively provides employees with information for and raise their awareness of their health promotion and management.

Registered trademark of the Workshop for the Management of Health on Company and Employee As measures to support employees' mental health, the employees, workplaces, the Health Management Promotion Center, and Human Resources respectively play their roles, and use external resources for the prevention and treatment of mental health issues.

In FY2021, we held an online event that our employees and their families can join and get into the habit of exercising in their daily lives.

### Acquired Recognition for "the Certified Health & Productivity Management Outstanding Organization – White 500"

We were again certified as the Health & Productivity Management Outstanding Organization for 2022. In the program, the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi recognize outstanding enterprises engaging in efforts for health and productivity management.

With Respect for Both Individuals and the Global Environment Relationship with the Society

# / Basic Approach

We aim to contribute to local communities by taking advantage of our unique corporate characteristics, including our capacity to improve living environments and to offer opportunities for personal development. We take part in and support groups involved in activities of this nature. We also undertake our own community projects across the globe, tailoring them to local cultures and customs, and earning the trust of the international community.

### Regional Alliance for Promotion of Employment of Persons with Disabilities

IBIDEN OASIS Co., Ltd. was certified as a specialpurpose subsidiary and started its operation in April 2019. It provided online job training to physically disabled students and students with special health care needs in the Gifu Prefecture while cooperating with the Gifu Prefectural Board of Education to expand their opportunities to work from home.

From now on, IBIDEN OASIS Co., Ltd. will stably employ disabled persons with a desire to work, and work with local entities such as schools for special needs education and relevant support centers to provide support



Visit our website for details of our social contribution activities. https://www.ibiden.com/esg/social/contribution/



Our activities to encourage employees to get into the habit of exercising by joining walking events, etc. and the excellent support system of our Health Management Promotion Center were highly evaluated.



| Certified category                      | Company Name   |  |  |
|---|--|--|--|
| White 500 <sup>*</sup>                  | IBIDEN Co., Ltd.   |  |  |
| Large Enterprise<br>Category            | TAK Co., Ltd.<br>IBIDEN Jushi Co., Ltd.<br>IBIDEN Industries Co., Ltd. |  |  |
| Small and Medium<br>Enterprise Category | IBIDEN Engineering Co., Ltd.<br>IBIDEN Bussan Co., Ltd.                |  |  |

% Top 500 enterprises certified in the Large Enterprise Category



for occupational self-reliance through creation of a safe work environment and the development of their potential abilities.

# Conserving Biodiversity and Concrete Approach to its Sustainable Use

We will contribute to conserving biodiversity in local communities and its sustainable use by practicing forest conservation activities that support stable water source and social contribution activities in collaboration with the local community mainly upstream along the lbi River, where the IBIDEN Group originated.

In these activities, we also work together with organizations outside of the Company including local municipal governments, and we participate in the Keidanren Initiative for Biodiversity Conservation promoted by Keidanren (Japan Business Federation) and other organizations for information sharing.



# **Basic Views**

Through Digital Transformation (DX), the Company aims at enhancing its productivity and manufacturing competitiveness by promoting DX of both the manufacturing processes and the functional divisions.

Through DX of the manufacturing processes, we will centralize management of information on facilities such as processing conditions and abnormalities, information on

inspection machines that affects quality, and information of production control to accelerate reform of the processes. Through DX of the functional divisions, we will revise or abolish uneven, overburdened, or wasteful operations and digitalize the rest, not only to improve but to renovate and reform the operations.

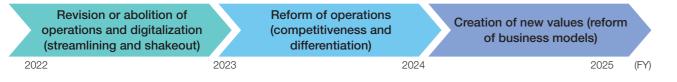
# **Roadmap of the DX Initiatives**

We have been promoting DX in all sections and departments until FY2021. In addition, we newly established the DX Promotion Management Division under the Strategic Corporate Planning Operation in FY2022 for company-wide DX management and establishing of an integrated DX system.

Furthermore, we established the DX Promotion Division under the PKG Operation to complete DX in existing plants, while constructing a new building in Gama Plant as a smart factory, which is scheduled to be completed in the second half of the FY2023.

We will optimally use our managerial resources and maximize our production efficiency by introducing and organizing a company-wide IT platform to capitalize on digital data.

In addition, we create an environment that enables to keep the operation safe even in an emergency such as the spread of COVID-19 and cyberattacks by providing environment and robust security for tele work.



#### TOPICS Effective Inventory Control of Maintenance Parts by Using RFID\*

Maintenance parts are part of the inventories, and their quantities of stock and values in money should be managed accurately. We use RFID for management of those parts and succeeded in streamlining the management operations.

In a conventional physical inventory check, tens of thousands of inventories and their quantities are listed, and personnel in charge of maintenance counted them one by one in a pair or a group and added up the quantities after manual entry. After the introduction of RFID and the process change, maintenance parts are managed in a system, and those in charge of maintenance read RFID and check the quantities against the inventories and their quantities stored in the system. As a result, the inventory check is completed accurately in one day, allowing us to spare more time for strategic operations than the conventional check that required about one month. \* Radio frequency identification. It is an automatic identification technology using near field communication

# Development of Human Resources Engaged in DX

In FY2021, the Company disseminated information on plans for DX and advanced cases to all employees through the intranet to reform their awareness and advance their knowledge on DX. We will prepare a company-wide training system to promote DX.

To ensure hiring of DX talents in spite of the global needs for them, we take intensive recruiting activities and actively hire skilled individuals overseas.

# Introduction

# Supply Chain Management

# **Basic Approach**

To earn the trust of international community while operating business globally, both the Group and the entire supply chain must responsibly take actions that respond to social demands.

| Basic<br>Procurement | 1 | We will comply with laws, regulations and c and trust with suppliers. |
|----------------------|---|---|
| Policy               | 2 | We will offer fair trading opportunities to sup                       |
|                      | 3 | We will fulfill our human rights, environmenta activities.            |
|                      |   |   |

#### TOPICS Announced a Declaration of Partnership Building

In 2020, the Cabinet Office, the Ministry of Economy, Trade and Industry, the Small and 靠築宣言冊 Medium Enterprise Agency, and other organizations introduced a framework of a Declaration of Partnership Building, which aims to coexist and co-prosper in supply chains and to mutually improve added value through new partnerships. In March 2022, in support of this purpose, we announced the declaration under the name of our president to build backcasting strategic partnerships with our suppliers based on the following principles:

- (i) Further promoting the use of IT and working on the digitization across our supply chain in order to reduce workload and strengthen cooperation with our suppliers
- (ii) Observing desirable business practices between parental entrepreneurs and subcontractors Starting with this declaration, we will strive to further strengthen relationships by making efforts that exceed the obligations stipulated in the Subcontract Act, including cash payment in transactions, as well as employees in charge of procurement considering more than ever the manufacturing costs borne by subcontractors when setting prices.

We will also make the same efforts at domestic group companies, aiming to conduct fair and equitable dealings.

# **Quality Management**

# **Basic Approach**

By consistently developing cutting-edge technologies, IBIDEN contributes to the creation of a comfortable IT society as well as a society where cars and nature coexist through the proposal and supply of high-value-added products. Based on its "customer first" policy, the Group meets the needs of customers through unique technologies and designs that take into account the global environment. We understand that our greatest mission is to consistently supply safe and reliable products.

| The basic policy for the quality | Electronics | Based on the conc<br>grasping customer<br>IBI-TECHNO. |
|----------------------------------|-------------|---|
|                                  | Ceramics    | Through IBI-TECHN<br>add values to such               |
|                                  |             | through our produc                                    |

# IBIDEN Management System "IMS"

We have established the IBIDEN Management System (IMS), integrating quality management systems ISO9001 and IATF16949 as its basis, environment management system ISO14001, occupational health and safety management system ISO45001, and corporate management systems to improve the quality of every single operation process so that we will continuously improve the Group's business competitiveness and customer satisfaction level.

In addition, we are working to introduce G (Global)-IMS, which had been standardized based on the IMS, to domestic and overseas group companies.





Contributing SDGs





customs and build relationships based on mutual cooperation

ippliers.

tal and other social responsibilities through our procurement



cept of quality first, we will achieve customer satisfaction by clearly r needs and producing and providing reliable products through

NO, we will incorporate customers' real and potential needs and h needs while striving to provide moving experiences to customers ict making, which continually gives top priority to quality.

# Measures to improve quality

We hold design review meetings and quality assurance meetings at each process phase from development of cutting-edge technologies, product planning and design to mass production in order to consider optimum product specifications and production process.

In addition, we offer guidance, supports, and audits on quality improvement in our domestic and overseas group companies.

We are working to contribute to society and customers by building and maintaining systems that allow us to globally provide high quality products and thereby offering products and services exceeding the expectations of society and our customers.





# **Corporate Governance**

# **Basic Views**

The Group considers corporate governance to be a key management mechanism for transparent, fair, prompt and resolute decision-making, and all Group companies are thus actively committed to improving corporate governance. As part of our Group's corporate governance, we are enhancing internal control by proactively undertaking activities to advance compliance and risk management and we are expanding/ strengthening the management oversight functions of our

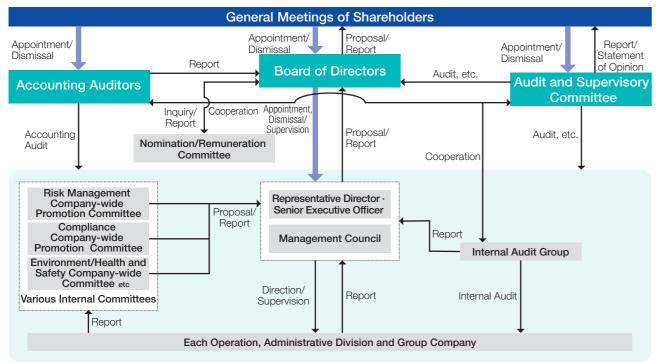
board of directors and the audit functions of our Audit and Supervisory Committee Members. These steps will enable us to construct a transparent corporate governance system worthy of the trust of shareholders and other stakeholders and fulfill our corporate social responsibilities, and will help us improve our corporate value through sustained growth.

# **Overview of the Corporate Governance Structure**

The Company has adopted the organizational form of a company with Audit and Supervisory Committee. To ensure fair and transparent company management, six (6) Outside Directors attend Board of Directors meetings and there provide advice on company management. For fair and transparent procedures applied to nominate these Outside Directors and to determine their compensation, the Company has voluntarily established Nomination/ Remuneration Committee. An Executive Officer System has been introduced to permit rapid management

decision-making and guicker execution of operations, which can clarify each role for Executive Directors and Senior Executive Directors and can get the right person in the right place with flexibility and mobility. The Audit and Supervisory Committee has also been given robust check-and-balance functions to help them monitor decision-making by the Board of Directors and the execution of operations by representative Directors.

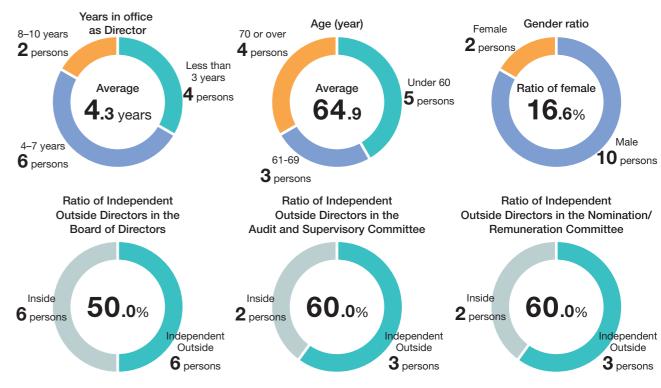
# Chart of IBIDEN Group's Internal Control System



# Posting of Information on Securing Independent Directors

Our company adopts a principle of ensuring that outside directors account for one-third or more of the Board of Directors so that they can contribute to appropriate corporate governance at the Company and offer advice on our standards of conduct. The Company has determined that Mr. Yamaguchi, Mr. Mita and Ms. Asai as Outside Directors and Mr. Kato, Mr. Horie and Ms. Yabu

#### Corporate Governance Highlight (As of June 17, 2022)



# **Toward Strengthening Corporate Governance**

| FY   | History of Corporate Governance Enhancement  |
|------|--|
| 2017 | <ul> <li>Shift from a Company with a Board of Auditors to<br/>Company with an Audit and Supervisory Committee</li> <li>Introduction of a New Stock Compensation Plan</li> <li>Increase of the numbers of Outside and female Directors</li> </ul> |
| 2020 | <ul> <li>Discontinuation of Executive Officer position</li> <li>Increase of the numbers of female Directors</li> <li>Change of the evaluating method of effectiveness of<br/>Board of Directors from self- to third-party evaluation</li> </ul>  |
| 2021 | <ul> <li>Major revision of authority regulations including rules for<br/>presenting proposals to the Board of Directors (transfer of<br/>substantial authority to execution divisions)</li> </ul>  |



as Outside Audit and Supervisory Committee Members present no potential conflict of interest with general shareholders and, convinced that we can count on them to contribute to appropriate corporate governance at the Company and to offer advice on our standards of conduct, we have assigned them as Independent Directors.

The Electronics and Ceramics Operations, which are both our main businesses, are confronted with a rapidly changing business environment. With the aim of streamlining management, expediting decision-making, and reinforcing audit and supervisory functions, we have worked on corporate governance enhancement, including institutional design change in FY2017.

In April 2022, the Company moved to the Prime Market of the Tokyo Stock Exchange, which requires a higher level of governance structure. We will continue our efforts to further improve the system, such as increasing the female ratio in the Board of Directors.

# **Corporate Governance**

# Evaluation of Effectiveness of Board of Directors

The Company conducts annual analysis and evaluation on the effectiveness of the Board of Directors, in order to improve the function of the Board of Directors as a whole, through a continuous process of reviewing whether the Board of Directors is functioning effectively as a whole and taking appropriate measures such as rectifying problems and enhancing strengths based on the result of such review. We discuss the results at the Board of Directors meetings and disclose the summary thereof.

### Process

| Questionnaire survey of<br>all directors, including<br>Outside Directors | Analysis and evaluation<br>involving third-party<br>organizations | Discussion in the Board<br>of Directors | Continuous efforts to solve the findings |  |
|--|---|---|--|--|
|--|---|---|--|--|

### Challenges and Issues Recognized and Further Company Actions

|   | FY 2020  |   | FY 2021   |
|---|--|---|---|
| Challenges and Issues   | Company Actions Taken  | Challenges and Issues   | Direction for Further Company Actions   |
| 1 All the IBIDEN<br>companies including<br>affiliated and<br>subsidiary<br>companies should<br>be amply supervised<br>and monitored at<br>the point of<br>establishment and<br>management of the<br>internal control<br>system. | The Audit and Supervisory Committee and the internal audit sections systematically conducted audit of each group company including our subsidiaries. The results and issues had been shared in a meeting attended by management of the parent company, head of the related functional divisions, and presidents of subsidiaries. In April 2022, we established a dedicated unit for supervising affiliates and subsidiaries. | <ol> <li>Review of matters<br/>to be deliberated at<br/>the Board of<br/>Directors meeting<br/>(standards for the<br/>submission of<br/>agenda items,<br/>enhancement of<br/>discussion on the<br/>medium-term<br/>strategy)</li> </ol> | From FY2022, the Company has implemented significant revisions of rules on administration authority including revisions of standards for the submission of agenda items to the Board of Directors and considerably transferred authority to each Operation. For the enhancement of discussion on the medium- and long-term strategy at the Board of Directors meeting, ahead of the resolution by the Board of Directors on the next mid-term management plan to start from FY2023, the Company will provide adequate information to Outside Directors, and take enough time for deliberation including prior explanations. |
| ② Dialogues with<br>shareholders and<br>inverters should be<br>sufficiently fed back<br>to Board of<br>Directors.   | We have introduced reporting to the Board of<br>Directors, twice a year in principle, the content of<br>IR briefings, engagement activities with<br>shareholders and investors, and individual<br>meetings. Setting the above as matters to be<br>reported to the Board of Directors, we will<br>maintain this reporting practice.   | (2) Enhancement of<br>opinion exchange<br>"between Outside<br>Directors and Inside<br>Directors" and<br>"among Outside<br>Directors" at places<br>other than a Board<br>of Directors meeting  | The Company will, not sticking to face-to-face communications, make efforts and consideration in terms of operations, for example, offering opportunities of discussion on management issues only by Outside Directors.   |

# Policy on Cross-Shareholding

Our basic policy when engaging in investment for purposes other than pure investment is to verify the need for holding each individual stock from the perspective of its importance in implementing our business strategy and strengthening business alliances for the sake of improving our corporate value over the medium-to-long term. Meanwhile, the Company is aiming to reduce cross-shareholdings by appropriately selling those shares deemed unnecessary.

Furthermore, the Company verifies the benefits and risks of holding listed shares for cross-shareholding purposes along with profitability in light of capital costs and other factors at the Board of Directors on an annual basis. Regarding the shares that are deemed necessary to be held by the Company, we disclose the purpose of such holding in Securities Reports.

# Transition of Cross-Shareholdings (Consolidated)

| FY                       |               | 2017    | 2018    | 2019    | 2020    | 2021    |
|--------------------------|---------------|---------|---------|---------|---------|---------|
| Carrying amount          | (million yen) | 51,954  | 39,142  | 34,461  | 68,198  | 64,638  |
| Net assets               | (million yen) | 286,367 | 276,305 | 273,934 | 321,863 | 370,728 |
| Percentage in net assets | (%)           | 18.1    | 14.2    | 12.6    | 21.2    | 17.4    |

# Compensation of the Senior Management and Directors

Based on the corporate philosophy, the Company has designed its officers' compensation system in a way that clarifies management responsibilities while also providing an incentive toward improving our corporate value over the medium-tolong term through sustained growth.

# The remuneration for the Company's Corporate Directors who are not Audit and Supervisory Committee Members and Senior Executive Officers

It comprises (1) a fixed monthly remuneration, (2) bonuses, as - 3 - performance-linked remuneration, and (3) stock compensation, at a ratio of roughly 50%, 35%, and 15%, respectively.

| Basic policy on compensation<br>configuration       | Fixed remuneration | Performance-linked remun | eration                        |
|---|--------------------|--------------------------|--------------------------------|
| (Company's Corporate<br>Directors who are not Audit | Basic remuneration | Short term               | Medium-to<br>long term         |
| and Supervisory Committee<br>Members)               | (50%)              | Bonus<br>(35%)           | Sharebased<br>payment<br>(15%) |

### <Company's Corporate Directors who are not Audit and Supervisory Committee Members> Monthly remuneration

The monthly remuneration for Corporate Directors who are not Audit and Supervisory Committee Members is calculated within the limits approved by the general meeting of shareholders, based on the remuneration table provided in the internal regulations according to their job positions, with broad consideration to their job responsibilities and external remuneration survey data, among others. The Board of Directors has resolved to subsequently re-entrust the determination of such remuneration to President & CEO, who is best qualified to make a comprehensive assessment of each recipient including their job performance, in accordance with deliberations and reports by the Nomination/ Remuneration Committee on individual payment amounts. Bonus

Bonuses are paid in cash once a year after the end of each fiscal year within the scope of a total amount based on a prescribed formula approved by the general meeting of shareholders.

# Outside Directors who are not Audit and Supervisory Committee Members and Members of the Audit and Supervisory Committee

Outside Directors who are not Audit and Supervisory Committee Members and Members of the Audit and Supervisory Committee, being in positions independent of the execution of operations, are only paid fixed remuneration of a certain amount within the limits approved by the general meeting of shareholders.

# Amount of compensation etc. of Directors (FY2021)

| Amount of compensation, etc                                     | ., of Directors (F1202  |                                      |                       | (Millions of yen) |                    |    |
|---|-------------------------|--------------------------------------|-----------------------|-------------------|--------------------|----|
|   |                         | Total amount of remuneration by type |                       |                   |                    |    |
| Position  | recipients<br>(persons) | remuneration<br>paid                 | Basic<br>remuneration | Bonus             | Sharebased payment |    |
|   | Directors               | 4                                    | 446                   | 195               | 173                | 77 |
| Directors who are not Audit and<br>Supervisory Committe Members | Outside Directors       | 3                                    | 36                    | 36                |                    |    |
|   | Subtotal                | 7                                    | 482                   | 232               | 173                | 77 |
|   | Directors               | 3                                    | 57                    | 57                |                    |    |
| Directors who are Audit and<br>Supervisory Committe Members     | Outside Directors       | 4                                    | 36                    | 36                |                    |    |
|   | Subtotal                | 7                                    | 93                    | 93                |                    |    |
| Total   |                         | 14                                   | 576                   | 326               | 173                | 77 |

% These figures are rounded down to nearest million ven.



### <Senior Executive Officers> Monthly remuneration

The monthly remuneration for Senior Executive Officers is calculated based on the remuneration table provided in internal regulations according to their positions, with broad consideration to the suitable balance with Corporate Directors who are not Audit and Supervisory Committee Members, evaluation of their individual job performance, and external remuneration survey data. The Board of Directors has resolved to entrust the determination of such remuneration to President & CEO in accordance with deliberations and reports by the Nomination/Remuneration Committee.

# Bonus

Bonuses are calculated based on the degree of contribution to the Company's operating results made by each Senior Executive Officer, and the Board of Directors has resolved to entrust the determination of such bonuses to President & CEO in accordance with deliberations and reports by the Nomination/Remuneration Committee.

# Messages from Outside Directors



The Company started as a hydroelectric power generation and through its 110-year history it has consistently taken on the challenge of entering new business fields to become a leading company. Continuously taking on new challenges is no easy matter, but I feel a real enterprising spirit in the interactions between managers and executives. This corporate culture is an inimitable asset and I believe it truly embodies the IBIDEN WAY.

The Company's mainstay Electronics Operation is currently undergoing a particularly dramatic change. In order to realize further development, including creating new pillars to support the business, it is extremely important that our management approach is thoroughly understood by not only managers, but also frontline personnel, so that they can work with drive and energy. As a company that operates globally, we have non-Japanese employees who come from differing cultures. Ensuring that these employees understand and implement the IBIDEN WAY will become a driver for further growth.

Regarding the Board of Directors, as there is no overlap in areas of expertise, each director is able to confidently express an opinion from their own individual perspective. Fellow directors listen properly and then offer their own opinions, so I feel that discussions have become dynamic. Within this, I am leveraging my business management experience to monitor whether management



As a member of the Audit and Supervisory Committee, my main role is to monitor the operation of corporate governance. As the Company's business is currently growing, I am also always carefully watching the appropriateness and recoverability of investment amounts from my perspective as a specialist in finance and accounting. The Company is expanding its business globally, so I am facilitating discussion by the Board of Directors and other bodies on ways to further strengthen internal controls and governance at overseas subsidiaries in a way that takes into account the legal systems of each country. I also regularly meet with the divisions responsible for monitoring areas such as legal compliance, general oversight of regional top management, corporate misconduct, ethics violations, and geopolitical risk, in order to confirm the Group-wide risk situation.

Going forward, challenges for the Company from a sustainability perspective include addressing the SDGs and disclosing climate change and other non-financial information. I think one of the characteristics of the Company is that decisions are made swiftly, based on information backed by research that takes into account recent trends and product development potential. The foundation for this is a corporate philosophy that advocates "respect for both individuals and the global environment," which makes it clear that action should not



The IC package substrate business, one of the Company's pillars of earnings, is an important business as it supports the evolution of the semiconductor modules that are essential for 21st century digital societies. One of the Company's strengths is its ability to anticipate trends in digital innovation and customer needs and then practice assertive business management using world-beating technology. I feel that this bold and proactive willingness to take action reflects the very essence of the IBIDEN WAY.

The Company is currently carrying out large-scale medium-term investments, increasing production capacity, and expanding its business, so I think an important issue to be addressed is the reinforcement of human capital to support these efforts. As a member of the Audit and Supervisory Committee, I strive to maintain an understanding of the actual situation at the Company by taking part in site audits of Head Office and Group companies, participating in events to promote female advancement, and other means. Steady efforts to put women in positions of responsibility so that they can become key team players are beginning to show results. However, from a diversity perspective, it is important that we build a workforce that is varied not only in terms of the specialist skillsets of individuals, but also in terms of gender, age, and nationality. We need to embrace diversity and utilize it in actual business operations.



decisions are consistent with medium- to long-term plans and whether decision making is fully compliant in terms of governance. As we continue to make capital investments, I will also contribute to ensuring that future development is sustainable, by, for example, confirming whether there is any future risk and whether risk has been fully discussed and considered.

be taken solely in pursuit of profit. The Company has determined key issues and is working to achieve the SDGs, and I think one of its strengths is an ability to find and execute ways of generating profits through these efforts while maintaining consistency with management strategy. Going forward, we will be required to disclose non-financial information concerning human capital, diversity, and climate change risks, and I hope to contribute by providing advice based on the most up-todate knowledge.

To develop further, it is crucial that we build work environments that enable active participation by diverse human resource through the establishment of both hard infrastructure, such as physical facilities, and soft infrastructure, such as awareness and mindsets. Creating satisfying work environments will improve the motivation of employees and enable them to take pride in their work. I will continue aiming for sustainable growth by leveraging my experience to identify challenges for the Company, offer solutions, and advance discussion in a way that supports management efforts.

# Senior Management and Directors (As of September 2022)



# Takeshi AOKI

President & CEO, Representative Director, Administrator of Corporate Business Operation, R&D Operation Officer

| April | 1981 | Joined IBIDEN Co., Ltd.  |
|-------|------|--|
| April | 2008 | Corporate Officer  |
| June  | 2013 | Director & Corporate Officer   |
| April | 2014 | Director & Managing Officer  |
| March | 2016 | Executive Vice President, Representative Director,<br>President of Ceramics Operation                          |
| April | 2017 | Administrator of Corporate Business Operation (present),<br>Corporate Executive Director of Ceramics Operation |
| June  | 2017 | President & CEO, Representative Director (present)   |
| June  | 2018 | Corporate Executive Director of R&D Operation (present)  |

April 2019 Corporate Executive Director of Internal Audit Division



June

# Masahiko IKUTA

Executive Vice President, Representative Director, Deputy Administrator of Corporate Business Operation, DX Promotion Officer, IR Officer and President of Strategic Corporate Planning Operation

- April 1985 Joined IBIDEN Co., Ltd.
- April 2010 Corporate Officer
- October 2013 President of Strategic Corporate Planning Operations (present), Corporate Executive Director of IR (present), Corporate
  - Executive Director of FGM Operation 2014 Director & Managing Officer
- March 2016 Director & Executive Managing Officer
- April 2017 Corporate Executive Director of Affiliates and Subsidiaries
- June 2017 Executive Managing Officer
- June 2018 Director & Executive Managing Officer
- April 2019 Corporate Executive Director of PKG Operation
- April 2020 Director & Senior Executive Officer
- April
   2021
   Executive Vice President, Representative Director (present), Corporate Executive Director of Electronics Operation

   April
   2022
   Deputy Administrator of Corporate Business Operation (present), DX Promotion Officer (present)



# Chiaki YAMAGUCHI Outside Director, Chairman of Nomination/

Remuneration Committee

- April 1972 Joined TOYOTA MOTOR CORPORATION
- June 2003 Full-time Corporate Auditor of Toyota Motor Corporation (retired on June 2011)
- June 2011 Executive Managing Director of Toyota Industries Corporation
- June 2012 Representative Director & Senior Vice President of Toyota Industries Corporation (retired on June 2015)
- June 2014 Outside Director of IBIDEN Co., Ltd. (present)
- June 2015 President & Representative Director of TOYOTA FUDOSAN CO., LTD., formerly Towa Real Estate Co., Ltd. (retired on June, 2018), Outside Director of Nakanihon KOGYO Co., Ltd. (retired
- on June 2019) June 2018 Contract Officer for Special Duties of TOYOTA MOTOR

CORPORATION (present), Outside Auditor of Central Nippon Expressway Company Limited (retired on June 2022) Corporate Advisor of TOYOTA FUDOSAN CO., LTD., formerly Towa Real Estate Co., Ltd. (retired on June 2019)

June 2019 Contract Officer for Special Duties of TOYOTA FUDOSAN CO., LTD., formerly Towa Real Estate Co., Ltd. as former President & Representative Director (present)



# Kozo KODAMA

Executive Vice President, Representative Director, Quality Unit Officer, Engineering Unit Officer, Production Unit Officer, GX Promotion Officer, President of Strategic Manufacturing Operation, Energy Control Unit Officer and Internal Audit Division Officer

- April 1986 Joined IBIDEN Co., Ltd.
- April 2012 Corporate Officer, Vice President of IBIDEN Philippines Inc.
- June 2015 Director & Managing Officer
- March 2016 Executive Vice President, Representative Director (present)
- April 2017 President of Corporate Strategic Manufacturing Operation (present), Corporate Executive Director of CSR Promotion Division and Energy Control Division
- February
   2018
   Chairman of IBIDEN Electronics Malaysia

   June
   2018
   Corporate Executive Director of Quality Unit, Engineering Unit & Production Unit (present)
- December 2018 President of MLB Operation, President of IBIDEN Electronics Beijing (present)
- April 2021 DX Promotion Unit Officer, Energy Control Unit Officer (present)
- April 2022 GX Promotion Officer (present), Internal Audit Division Officer (present)



# Koji KAWASHIMA

Director & Senior Executive Officer, Electronics Business Officer, President of PKG Operation

- April 1987 Joined IBIDEN Co., Ltd.
- April 2008 Director
- April 2010 Corporate Officer, President of PKG Operation
- April 2014 Human Resources Director of Strategic Corporate Planning Operations
- March 2016 Executive Managing Officer
- April 2017 President of Electronics Operation
- April 2019 President of PKG Operation (present)
- April 2020 Senior Executive Officer
- April 2022 Electronics Business Officer (present)
- June 2022 Director & Senior Executive Officer (present)



- April 1969 Joined Chubu Electric Power Co., Inc.
- June 2003 Managing Officer, Tokyo Office Manager of Chubu Electric Power Co., Inc.
- June 2005 Director, Senior Managing Executive Officer, President of Sales Company of Chubu Electric Power Co., Inc.
- June 2006 President & CEO of Chubu Electric Power Co., Inc.
- June 2007 President &CEO, Representative Director of Chubu Electric Power Co., Inc.
- June 2010 Chairman of the Board at Chubu Electric Power Co., Inc.
- June 2015 Advisor of Chubu Electric Power Co., Inc. Outside Auditor of NYK Line (retired on June 2019)
- June 2017 Outside Director of IBIDEN Co., Ltd. (present)

July

- June 2018 Outside Auditor of Nagoya Railroad Co., Ltd. (present)
- June 2019 Outside Auditor of Chubu-Nippon Broadcasting Co., Ltd. (present)
  - 2020 Corporate Advisor of Chubu Electric Power Co., Inc. (present)



Noriko ASAI Outside Director

| April   | 1997 | Assistant Instructor of the School of Economics at<br>Nagoya University   |
|---------|------|---|
| March   | 1999 | Nagoya University Ph.D. in Economics  |
| April   | 2007 | Professor at the School of Management of Chukyo University  |
| June    | 2015 | Outside Director of CKD Corporation (present)   |
| June    | 2020 | Outside Director of IBIDEN Co., Ltd. (present)  |
| June    | 2021 | Outside Director of OKUMA Corporation (present)   |
| October | 2021 | Guest Faculty Member of Graduate School /School of<br>Economics of Nagoya University (present)                          |
| June    | 2022 | Practical Data Scientist Development Program Student of<br>Mathematical and Data Science Center at Nagoya<br>University |



# Koji MATSUBAYASHI

Full-time Member of Audit and Supervisory Committee

| April   | 1987 | Joined The Sumitomo Bank, Ltd.  |
|---------|------|---|
| October | 1994 | Deputy Chicago Branch General Manager                                       |
| October | 1996 | New York Deputy US Credit Director of US Headquarters                       |
| April   | 2001 | Manager of Sale Credit Division 1 in Sumitomo Mitsui<br>Banking Corporation |
| April   | 2010 | Deputy Manager of Corporate Sales in Saitama                                |
| May     | 2014 | London Credit Manager and Joint Audit Manager in<br>Europe Region           |
| April   | 2017 | Singapore Audit Manager   |
| October | 2020 | Joined IBIDEN Co., Ltd Manager of Internal Audit Unit (present)             |
| June    | 2021 | Full-time Member of Audit and Supervisory Committee (present)               |



# Masaki HORIE

Outside Director Outside Member of Audit and Supervisory Committee

| April       | 1973 | Joined PricewaterhouseCoopers Co., Ltd.  |
|-------------|------|--|
| November    | 1980 | Joined Ito Accounting & Consultancy Office   |
| July        | 1997 | Senior Partner of Ito Accounting & Consultancy Office  |
| January 2   | 2001 | Senior Partner of Chuo-Aoyama Audit Corporation  |
| September 2 | 2006 | Senior Partner of Arata Audit Corporation  |
| July        | 2010 | Established Masaki HORIE Certified Public Accountant<br>Office, Director of the Office (present)   |
| June 2      | 2011 | Outside Corporate Auditor of Tokai Rika Co., Ltd. (retired June 2015)  |
| June 2      | 2015 | Outside Corporate Auditor of Futaba Industrial Co., Ltd.   |
| June        | 2016 | Outside Corporate Director of Futaba Industrial Co., Ltd. (present)  |
| June        | 2017 | Outside Auditor of IBIDEN Co., Ltd.<br>Outside Corporate Director who is Audit and Supervisory<br>Committee Member of IBIDEN Co., Ltd. (present) |

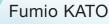
**Value Creation** 



# Yoichi KUWAYAMA

Full-time Member of Audit and Supervisory Committee

| April | 1983 | Joined IBIDEN Co., Ltd.  |
|-------|------|--|
| April | 2008 | Corporate Officer  |
| April | 2011 | President of DPF Unit  |
| April | 2012 | Managing Officer   |
| June  | 2012 | Director & Managing Officer  |
| April | 2014 | Director & Executive Managing Officer,<br>President of Ceramics Unit |
| March | 2016 | Corporate Executive Director of Audit                                |
| June  | 2016 | Full-time Corporate Auditor  |
| June  | 2017 | Full-time Member of Audit and Supervisory Committee (present)        |



Outside Director, Outside Member of Audit and Supervisory Committee, Chairman of Audit and Supervisory Committee

| July     | 2000 | Deputy Manager of Investigation Department Nagoya<br>Regional Taxation Bureau  |
|----------|------|--|
| July     | 2001 | Superintendent of Showa Tax Office   |
| August   | 2002 | Registered as certified tax accountant, Established Fumio<br>Kato Certified Tax Accountant Office, Representative of<br>Fumio Kato Certified Tax Accountant Office (present) |
| July     | 2004 | Outside Corporate Auditor of Seino Holdings Co., Ltd. (retired June 2020)  |
| May      | 2009 | Chairman of the Fixed Asset Valuation Review Committee of Kitagata-cho, Motosu-gun, Gifu (present)   |
| November | 2014 | Outside Corporate Auditor of HIMARAYA Co., Ltd.  |
| June     | 2015 | Outside Corporate Auditor of IBIDEN Co., Ltd.  |
| November | 2015 | Outside Director who is an Audit and Supervisory Committee<br>Member of HIMARAYA Co. Ltd. (retired March 2022)   |
| June     | 2017 | Outside Corporate Director who is Audit and Supervisory<br>Committee Member of IBIDEN Co., Ltd. (present)  |



# Yukiko YABU

Outside Director Outside Member of Audit and Supervisory Committee

| April   | 1981 | Joined Matsushita Electric Industrial Co Ltd.  |
|---------|------|--|
|         |      |  |
| January | 2006 | Director of Lifestyle Value Research Laboratory, R&D<br>Headquarters, Home Appliances Company, Panasonic |
|         |      | Corporation  |
| January | 2011 | Director of Global Consumer Research Center, Corporate   |
| ,       |      | Brand Strategy Division, Panasonic Corporation   |
| April   | 2013 |  |
|         |      | research at the Global Marketing Planning Center,  |
|         |      | Appliances Company, Panasonic Corporation  |
| March   | 2014 | Retired from Panasonic Corporation   |
| June    | 2014 | Outside Director of DUSKIN CO., LTD. (retired 2017)  |
| June    | 2015 | Outside Director of TAKARA HOLDINGS INC. (retired 2018)  |
| June    | 2016 | Outside Director of Daiwa House Industry Co., Ltd. (present)   |
| June    | 2019 | Outside Director of Furukawa Electric Co., Ltd. (present)  |
| June    | 2021 | Outside Corporate Director who is Audit and Supervisory  |
|         |      | Committee Member of IBIDEN Co., Ltd. (present)   |

# Overview of the Board of Directors (As of June 17, 2022)

In selecting Director candidates, to allocate a right person to right work, as a comprehensive deliberation, the sufficient number of the Board of Directors Members that enables the Board of Directors to make eligible and prompt decision and overall balance of knowledge, experience and skill with diversity including gender, internationality, career and age among the members of the Board of Directors are considered while referring to the reports by the Nomination/Remuneration Committee. Besides, we disclose the skill set required for the Board of Directors of the Company.

|                   | Expected skills                             |   |                                   |                              |                           |            |                               |                    |                                |  |  |  |
|-------------------|---|---|-----------------------------------|------------------------------|---------------------------|------------|-------------------------------|--------------------|--------------------------------|--|--|--|
| Name              | Independence<br>(Outside<br>Directors only) | Corporate<br>management<br>and strategy | Finance,<br>accounting and<br>tax | Knowledge of<br>our business | International<br>business | Innovation | Manufacturing<br>Technologies | Risk<br>management | Internal control<br>Governance |  |  |  |
| Takeshi AOKI      |   | •                                       |                                   | •                            | •                         | •          |                               |                    | •                              |  |  |  |
| Kozo KODAMA       |   |   |                                   |                              |                           |            | •                             | •                  | •                              |  |  |  |
| Masahiko IKUTA    |   | •                                       | •                                 |                              |                           |            |                               |                    | •                              |  |  |  |
| Koji KAWASHIMA    |   | •                                       |                                   | •                            | •                         |            | •                             |                    |                                |  |  |  |
| Chiaki YAMAGUCHI  | •   | •                                       | •                                 |                              | •                         |            |                               | •                  | •                              |  |  |  |
| Toshio MITA       | •   | •                                       |                                   |                              |                           |            |                               | •                  | •                              |  |  |  |
| Noriko ASAI       | •   | •                                       |                                   |                              |                           | •          |                               | •                  |                                |  |  |  |
| Yoichi KUWAYAMA   |   |   |                                   | •                            | •                         |            |                               | •                  | •                              |  |  |  |
| Koji MATSUBAYASHI |   |   | •                                 |                              |                           |            |                               | •                  | •                              |  |  |  |
| Fumio KATO        | •   |   | •                                 |                              |                           |            |                               |                    | •                              |  |  |  |
| Masaki HORIE      | •   |   | •                                 |                              |                           |            |                               |                    | •                              |  |  |  |
| Yukiko YABU       | •   |   |                                   |                              |                           | •          |                               | •                  | •                              |  |  |  |

Note: The above skills matrix does not cover all skills that the candidates for Directors and the Audit and Supervisory Committee Members have, but shows those that the Company particularly expects them to have within the skill set required for the Board of Directors

# Skill Set Required for the Board of Directors

| Required skills                         | Reasons   |
|---|---|
| Corporate<br>management<br>and strategy | Extensive knowledge, experience, and skills are required to make critical management decisions as a manager responsible for corporate management and organizational operations in Japan and overseas amidst a rapidly changing and uncertain business environment.  |
| Finance,<br>accounting and<br>tax       | As a manufacturer focused on the IC package substrate business, it is essential to make continuous capital investments<br>and procure flexible and cost-competitive financing to support these investments. At the same time, it is necessary to<br>build a sound and strong financial structure to prepare for risks. Therefore, specialized and advanced knowledge, such as<br>finance, accounting, tax, is required to monitor and oversee that these are achieved in optimum balance and that financial<br>and tax compliance is ensured. |
| Knowledge of our business               | Deep knowledge of the Company's business is required in order to make high-level business management decisions, including business policies, and to appropriately manage and supervise the business execution by business sections, which is required for the Board of Directors of monitoring role.  |
| International business                  | Our main customers are from overseas, and we have production and sales bases all over the world. Therefore, international business experience and skills are required to make management decisions based on country risks including geopolitical risks as well as market and customer trends.   |
| Innovation                              | To realize our mission of "contributing to the progression of society through innovative technology" as a technology development company, it is necessary to correctly recognize social issues and customer needs, and to create innovations to solve them, not only with our own proprietary technologies, but also in collaboration with external parties. A deep knowledge of innovation is required to properly monitor and supervise these activities.   |
| Manufacturing<br>Technologies           | As a manufacturing company focused on cutting-edge IC package substrates and advanced ceramic components, we need to build superior competitiveness in our own production facilities and manufacturing processes in order to survive in the global competitive environment. A deep knowledge of manufacturing and technology is required to properly monitor and supervise these activities.  |
| Risk<br>management                      | In order to sustainably improve corporate value over the medium- to long-term, we must be sensitive to changes in the external environment, and identify and respond to risks appropriately. To make this possible, a high level of sensitivity to risk and risk management skills that enable prompt and determined management decisions are required.   |
| Internal control<br>Governance          | In order to establish, monitor, and supervise a corporate governance system and fair and transparent decision-making processes that earn the trust of shareholders and other stakeholders, advanced knowledge of internal control and corporate governance and a high level of awareness of legal compliance are required.  |

Refer to the Corporate Governance Report for details on the governance system, including the reasons for the appointment of outside directors. https://www.ibiden.com/ir/library/governance/



|                                       |                    |                                    |  | Corporate Directors | Outside Directors                                      | Chairperson                                       |
|---------------------------------------|--------------------|------------------------------------|--|---------------------|--|---|
|                                       |                    | Memb                               | ers and attendance of                  | each committee and  | meeting  |   |
| <ul><li>Male</li><li>Female</li></ul> | Board of Directors | Audit and Supervisory<br>Committee | Nomination /<br>Remuneration Committee | Management Council  | Risk Management<br>Company-wide Promotion<br>Committee | Compliance Company<br>wide Promotion<br>Committee |
| •                                     | 0 12/12            |                                    | 8/8                                    | 13/13               | • 1/1  | 0 1/1   |
| •                                     | 12/12              |                                    |  | 13/13               | 1/1  | 1/1   |
| •                                     | 12/12              |                                    |  | 0 13/13             | 1/1  | 1/1   |
| •                                     | -                  |                                    |  | 13/13               | 1/1  | 1/1   |
| •                                     | 12/12              |                                    | 8/8                                    |                     |  |   |
| •                                     | 12/12              |                                    | 8/8                                    |                     |  |   |
| •                                     | 12/12              |                                    | 8/8                                    |                     |  |   |
| •                                     | 11/12              | 12/13                              |  | 12/13               | 1/1  | 1/1   |
| •                                     | 10/10 (**1)        | 10/10 (**1)                        |  | 13/13               | 1/1  | 1/1   |
|                                       | 12/12              | 0 13/13                            |  |                     |  |   |
| •                                     | 12/12              | 13/13                              |  |                     |  |   |
| •                                     | 10/10 (**1)        | 10/10 (**1)                        |  |                     |  |   |

(%1) Attendance after taking office on June 18, 2021

# (32) The five Nomination/Remuneration Committee Members are the above four Directors and Hiroki TAKENAKA, the Chairman of the Board.

# Policy for the Development of Next Generation Management Executives

For the development of next generation management executives, we newly established a Senior Management system in FY2020. We position employees in Senior Management positions as next generation management executive candidates, and have these employees

# **Communication with Shareholders and Investors**

IBIDEN takes steps to disclose information at appropriate times to shareholders and investors in a fair, accurate, and easy-to-understand manner. We held a general meeting of shareholders in the multi-purpose hall in the IBIDEN Headquarters Building on June 17, 2022. We have sought to establish a more open environment by adopting the voting rights exercise platform and making possible the exercise of voting rights via the Internet and smart phones, etc., for shareholders who are unable to attend the meeting. In addition, to ensure prompt disclosure, the Notice of Ordinary General Meeting of Shareholders is available on our website and platform by a week before mailing it to shareholders. Furthermore, in consideration of shareholders who are unable to attend





Introduction



- participate in Executive training. In addition, by developing the educational program for employees in Senior Management positions, we will develop human resources in a planned way.
- General Meetings of Shareholders at the venue due to the COVID-19 pandemic, we have introduced livestreaming of General Meetings of Shareholders on our website for shareholders and investors since last year.
- As for other IR activities, we hold periodic briefings for analysts and institutional investors after the announcement of business results for the full year and those for the interim term, and release materials for the briefings on our website.
- The opinions of shareholders ascertained through dialogue are fed back to the Board of Directors, the President & CEO, and relevant Directors and sections as necessary to share and utilize the information.



# **Risk Management**

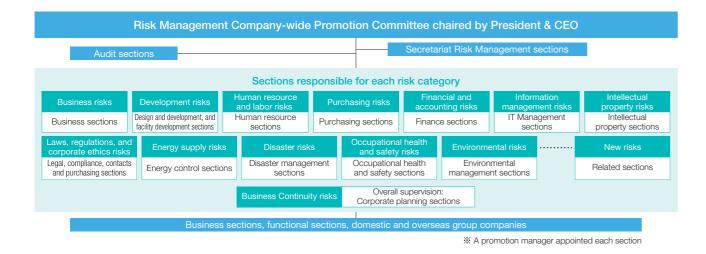
# Compliance

# / Risk Management Basic Approach

The IBIDEN Group enables business continuity by analyzing various risks surrounding management, accurately handling losses of business resources that have a great negative impact on the ease of our business operations, ensuring the safety of our shareholders, customers and officers, and reducing and preventing losses of business resources.

# Structure for Advancing Risk Management

We established Risk Management Company-wide Promotion Committee as an organization to promote risk management, where we review and decide the overall risk management, and report the countermeasures to the major risks and the progress. To embody the policies the Committee decided, we assign a department in charge by each risk category to promote the risk management activities suitable to the situation and operational type of domestic and overseas Group companies.



# / Activities for Advancing Risk Management

# **1** Business Continuity Plan and Readiness for Natural Disaster

We have identified large-scale disasters, including natural disasters such as earthquakes or floods, equipment accidents, infectious diseases, cyberattacks, and serious crimes, as risks that can have significant impacts on our business continuity. We also have established an initial response policy and are working on countermeasures in preparation for the event of such a crisis.

In the event of a large-scale natural disaster, we believe that lifesaving comes first, followed by the early recovery of product supply to customers. Accordingly, we have established a system to deal with specific risks including the confirmation of the safety of employees and equipment failure.

Visit our website for details of our risk management. https://www.ibiden.com/esg/governance/risk-management/

# 2 Information Security Measures

Information concerning the operation, technologies and management of the Company is a valuable asset, and proper management of information including confidential information of customers and suppliers and prevention of leakage are important issues and responsibilities.

We have established a framework for information security promotion to block illegal access, etc. from the outside, and laid down a basic policy for proper use and custody of the information assets we own such as trade secrets, personal information and IT security environment under the "Regulations for Information Management."

# Compliance Basic Policy

By achieving thoroughgoing commitment to "compliance with domestic and international laws, our articles of incorporation, internal regulations and corporate ethics" (Compliance) and through open and fair corporate activities, we aim to be a company that international society relies on.

# Structure for Promoting Compliance Program

To raise awareness of compliance across the Group, we established Compliance Company-wide Promotion Committee, which promotes, manages, reports and reviews the company-wide compliance activities. The policies and plans the Committee decides are announced to each plant as well as domestic and overseas Group companies, and then rolled out.

# Whistleblowing System

In addition to the formal channel of reporting, the Group has established a compliance consultation service to facilitate reporting when an officer or employee discovers a violation of compliance. The company's consultation counter includes a counter through which the whistleblower can report nominally to the person in charge of the consultation service, and a counter through which the whistleblower can report anonymously to an outside expert. The consultation counters have been operated with due consideration for the protection of rights of whistleblowers, such as anonymity assurance, privacy protection and ensuring no disadvantageous treatment.

Should an incident related to compliance occur, the Compliance Committee chaired by the Executive Officer in charge of compliance promotion is called and discussions take place on appropriate actions to address the situation as well as preventative measures for future incidents. Serious incidents in particular are reported to the Board of Directors.

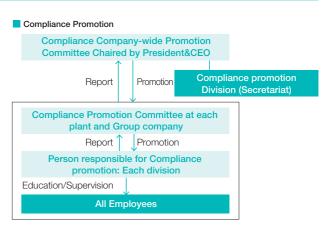
# / Bolstering Compliance Activities

# **1** Compliance Education

When promoting compliance activities, it is crucial that employee awareness is continuously maintained at a high level. The Company has established an environment enabling all those working at on-site workplaces (including part-time workers and contract workers) to systematically receive education and training immediately after their employment regarding the Standards for Employee Behavior, which sets forth the compliance standards to be followed by officers and employees. In addition, we are promoting special education programs, including ones focused on various laws and regulations and corporate taxation.







# Compliance Consultation



# 2 Efforts for Fraud Prevention including Anti-bribery

The Group upholds the IBIDEN Group Charter of Behavior to make efforts to prevent every form of corruption. In the Standards for Employee Behavior also, we demand ethical behavior and strictly prohibit unlawful actions and acts of conflict of interest including bribery. To avoid misconduct, we have appropriately developed a system for ensuring a certain prevention of corruption in line with the current conditions of each site, including measures such as stricter authorization when paying social expenses, the establishment of Gift-giving and -receiving Guidelines, and the development of a Whistleblowing System.

# Main Financial and Non-Financial Data Fiscal years ended on March 31

|  |                   | 159th<br>FY2011 | 160th<br>FY2012 | 161th<br>FY2013 | 162th<br>FY2014 | 163th<br>FY2015 | 164th<br>FY2016 | 165th<br>FY2017 | 166th<br>FY2018 | 167th<br>FY2019 | 168th<br>FY2020 | 169th <sup>**4</sup><br>FY2021 |
|--|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------------------|
| Financial Data   |                   |                 |                 |                 | -               |                 |                 |                 |                 |                 |                 |                                |
| Net sales  | (Millions of yen) | 300,863         | 285,946         | 310,268         | 318,072         | 314,119         | 266,459         | 300,403         | 291,125         | 295,999         | 323,461         | 401,138                        |
| Operating income   | (Millions of yen) | 15,515          | 5,419           | 23,442          | 26,039          | 22,570          | 7,141           | 16,702          | 10,137          | 19,685          | 38,634          | 70,821                         |
| Operating income to net sales ratio                            | (%)               | 5.16            | 1.90            | 7.56            | 8.19            | 7.19            | 2.68            | 5.56            | 3.48            | 6.65            | 11.94           | 17.66                          |
| Ordinary profit  | (Millions of yen) | 16,256          | 10,890          | 28,401          | 31,314          | 20,798          | 2,301           | 17,603          | 12,600          | 21,364          | 40,716          | 74,394                         |
| Profit (loss) attributable to owners of<br>parent              | (Millions of yen) | 10,647          | 2,232           | 17,479          | 19,107          | 7,530           | (62,848)        | 11,583          | 3,306           | 11,329          | 25,698          | 41,232                         |
| Total assets (   | (Millions of yen) | 425,871         | 430,040         | 462,113         | 519,847         | 476,110         | 405,783         | 436,425 *1      | 423,056         | 518,619         | 578,518         | 664,332                        |
| Return on assets   | (%)               | 2.59            | 0.52            | 3.92            | 3.89            | 1.51            | (14.25)         | 2.76 *2         | 0.77            | 2.41            | 4.68            | 6.64                           |
| Total net assets   | (Millions of yen) | 274,901         | 286,705         | 322,562         | 360,091         | 331,520         | 260,940         | 286,367         | 276,305         | 273,934         | 321,863         | 370,728                        |
| Equity ratio   | (%)               | 63.35           | 65.61           | 68.91           | 68.50           | 68.75           | 63.21           | 64.43 *3        | 64.03           | 51.74           | 54.61           | 54.88                          |
| Return on equity   | (%)               | 3.97            | 0.81            | 5.82            | 5.67            | 2.20            | (21.53)         | 4.31            | 1.20            | 4.20            | 8.80            | 12.12                          |
| Interest-bearing debt  | (Millions of yen) | 63,737          | 63,925          | 61,574          | 75,855          | 70,128          | 70,062          | 70,005          | 70,030          | 150,030         | 150,175         | 170,030                        |
| Free cash flow   | (Millions of yen) | (21,920)        | (13,224)        | 11,729          | 6,659           | 20,060          | 2,532           | 5,736           | 519             | (11,987)        | (43,390)        | 40,650                         |
| Capital expenditures   | (Millions of yen) | 47,313          | 43,262          | 37,731          | 56,350          | 40,955          | 20,997          | 22,409          | 22,892          | 57,076          | 78,189          | 60,615                         |
| Depreciation and amortization                                  | (Millions of yen) | 42,387          | 42,697          | 35,702          | 39,428          | 44,056          | 33,147          | 24,566          | 25,136          | 24,222          | 35,413          | 52,715                         |
| Research and development costs                                 | (Millions of yen) | 16,123          | 15,125          | 15,031          | 15,512          | 15,203          | 14,111          | 15,368          | 14,753          | 16,200          | 16,841          | 15,733                         |
| Net assets per share   | (yen)             | 1,885.53        | 2,043.29        | 2,305.93        | 2,578.85        | 2,459.63        | 1,927.53        | 2,012.60        | 1,938.59        | 1,920.19        | 2,262.99        | 2,611.43                       |
| Basic profit (loss) attributable to owners of parent per share | (yen)             | 74.41           | 15.97           | 126.58          | 138.37          | 55.29           | (472.26)        | 83.21           | 23.66           | 81.08           | 183.94          | 295.35                         |
| Dividends per share  | (yen)             | 30              | 30              | 30              | 35              | 35              | 35              | 35              | 35              | 35              | 35              | 40                             |
| Dividend payout ratio  | (%)               | 40.32           | 187.81          | 23.70           | 25.29           | 63.30           | _               | 42.06           | 147.90          | 43.17           | 19.03           | 13.54                          |

| Non-Financial Data                         |  |         |         |        |         |         |         |         |         |         |         |         |
|--|--|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Numbers of employees                       | (persons)                              | 11,374  | 11,879  | 14,122 | 14,306  | 14,290  | 13,961  | 15,574  | 14,718  | 13,019  | 13,161  | 12,958  |
| Numbers of non-consolidated employees      | (persons)                              | 3,385   | 3,549   | 3,554  | 3,549   | 3,614   | 3,544   | 3,515   | 3,525   | 3,537   | 3,504   | 3,549   |
| GHG emissions **                           | (thousand tons<br>of CO <sub>2</sub> ) | 576     | 623     | 641    | 718     | 762     | 602     | 666     | 649     | 606     | 574     | 581     |
| Of which Scope 1 *5                        | (thousand tons<br>of CO <sub>2</sub> ) | 237     | 182     | 147    | 124     | 127     | 136     | 134     | 144     | 142     | 155     | 182     |
| Of which Scope 2 **5                       | (thousand tons<br>of CO <sub>2</sub> ) | 339     | 441     | 494    | 593     | 635     | 466     | 532     | 505     | 464     | 419     | 399     |
| Water withdrawal                           | (thousands<br>of m³)                   | 12,272  | 12,769  | 12,044 | 11,754  | 11,251  | 10,573  | 11,961  | 11,986  | 11,798  | 12,519  | 13,756  |
| Renewable energy generation                | (MWh)                                  | 145,521 | 172,043 | 97,379 | 165,271 | 118,015 | 163,004 | 176,276 | 176,203 | 183,110 | 174,267 | 169,274 |
| Of which hydroelectric power generation    | (MWh)                                  | _       | _       | _      | 163,630 | 111,682 | 151,452 | 161,079 | 159,218 | 166,334 | 157,778 | 150,730 |
| Of which solar power generation and others | (MWh)                                  | _       | _       | _      | 1,641   | 6,333   | 11,552  | 15,197  | 16,985  | 16,776  | 16,489  | 18,544  |
| Occupational accident frequency rate ***   | 6                                      | 0.76    | 0.40    | 0.31   | 0.26    | 0.54    | 0.33    | 0.52    | 1.42    | 0.95    | 0.54    | 0.44    |

X1 Net assets per share are calculated based on the total number of shares issued and outstanding at the end of the fiscal year.

\*\*2 Basic earnings (loss) per share is calculated based on the average number of shares issued and outstanding during the period. The average number of shares issued and outstanding during the period is based on the number of shares after deducting the number of treasury shares.

%3 "Partial Amendments to Accounting Standard for Tax Effect Accounting, etc." (ASBJ Statement No. 28, February 16, 2018) have been applied from the beginning of the 166th term, and the main management indicators, etc. (\*1, 2, 3) related to the 165th term are indicators, etc. after retroactively applying the said accounting standard, etc.

%4 "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020) has been applied from the beginning of the 169th term, and the main management indicators, etc. related to the 169th term are indicators, etc. after applying the said accounting standard, etc. %5 With regard to the CO<sub>2</sub> emission factor at the time of calculation, we used the factor provided by the "List of Calculation Methods/Emission Factors in the Calculation, Report and Publication System" of the Ministry of the Environment and the Ministry of Economy, Trade and Industry in Japan as well as by gas distribution companies. From fiscal year 2020, when calculating the indirect CO<sub>2</sub> emissions (Scope 2), we use the conversion factors (IEA Emissions Factors 2020) published by the International Energy Agency when the CO<sub>2</sub> emission factors of electric utility companies are uncertain, in order to provide information closer to the actual state. The CO<sub>2</sub> emissions in fiscal year 2020 are recalculated using the emission factors as of January 2022.

%6 This indicates the number of work-related injury or death cases (equivalent to or more serious than cases of occupational accidents resulting in lost workdays) among a total of 1 million actual working hours. This is for IBIDEN and Domestic Group companies up to FY2017, and IBIDEN Group from FY 2018.



# Analysis of Our Business Performance and Financial Condition

# / Overview of the Fiscal Year Under Review

During the fiscal year under review, the global economy continued to see a steady movement toward normalization from the COVID-19 pandemic, particularly in developed countries. However, the situation became unstable due to the re-spread of infection by mutant strains since the end of last year, as well as soaring raw material costs and energy prices spurred by the Russian invasion of Ukraine. The domestic economy was increasingly uncertain due to the weakening yen and the rising prices of various materials on top of the lingering impact of COVID-19.

The semiconductors and electronic components market as a whole continued a growing trend. Such a trend was attributable to the continued strong market for servers, especially for use in data centers, as well as the consistently strong market for personal computers due to teleworking and online education becoming the norm and replacement demand resulting from the upgrade of OS.

The exhaust system components market in the automotive industry has shown a moderate recovery from the impact of COVID-19 since the summer of the previous fiscal year, but continued to face a severe situation

primarily due to the impact of the global shortage of semiconductors.

Given this situation, to achieve the final year targets of the new five-year medium-term management plan "To The Next Stage 110 Plan," which started in FY2018, we proactively allocated management resources into growing markets based on human resource development and have been working on measures for the realization of stable growth by increasing competitiveness of our existing businesses along with expanding new businesses.

As a result, net sales for the fiscal year under review amounted to ¥401,138 million, an increase of ¥77,677 million (24.0%) compared to the previous fiscal year. Operating income totaled ¥70,821 million, an increase of ¥32,186 million (83.3%) compared to the previous fiscal year. Ordinary profit amounted to ¥74,394 million, an increase of ¥33,677 million (82.7%) compared to the previous fiscal year. Profit attributable to owners of parent for the period stood at ¥41,232 million, an increase of ¥15,534 million (60.4%) compared to the previous fiscal year.

# / Analysis of Financial Situation

# 1 Assets

Total assets at the end of the fiscal year under review were ¥664,332 million (an increase of 14.8% compared to the end of the previous fiscal year). Current assets amounted to ¥363,270 million (a 27.3% increase), and fixed assets were ¥301,062 million (a 2.7% increase).

The significant contributing factor in the increase in current assets was an increase of ¥58,707 million in cash and deposits.

The significant contributing factor in the increase in fixed assets was an increase of ¥17,206 million in machinery and equipment.

# 2 Liabilities

Total liabilities at the end of the fiscal year under review were ¥293,603 million (a 14.4% increase). Current liabilities amounted to ¥156,160 million (a 18.4% increase), and long-term liabilities were ¥137,443 million (a 10.2% increase).

The significant contributing factor in the increase in current liabilities was an increase of ¥5,432 million in notes and accounts payable and an increase of ¥9,285 million in income taxes payable.

The significant contributing factor in the increase in long-term liabilities was an increase of ¥150 million in bonds.

# 3 Net assets

Total net assets at the end of the fiscal year under review were ¥370,728 million (a 15.2% increase).

The significant contributing factor in the increase in net assets was an increase of ¥35,232 million in retained earnings.

As a result, the equity ratio increased from 54.61% at the end of the previous fiscal year to 54.88%. In addition, net assets per share increased from ¥2,262.99 at the end of the previous fiscal year to ¥2,611.43.

# Analysis of Management Results

# 1 Net Sales and Operating Income

Net sales amounted to ¥401,138 million (an increase of 24.0% year-on-year).

Cost of sales was ¥281,059 million (an increase of 18.1% year-on-year). The cost-to-sales ratio increased 3.5 percentage points to 70.1%.

Accordingly, operating income totaled ¥70,821 million (an increase of 83.3% year-on-year).

# 2 Non-operating Income and Expenses and Ordinary Profit

Non-operating income and expenses increased from ¥2,082 million (net) in the previous fiscal year to ¥3,573 million (net) in the fiscal year under review. This was mainly due to an increase of ¥1,374 million in foreign exchange gains.

Accordingly, ordinary profit amounted to ¥74,394 million (an increase of 82.7% year-on-year).

# 3 Extraordinary Income or Loss

Extraordinary losses (net) increased from ¥8,550 million in the previous fiscal year to ¥15,142 million in the fiscal year under review. This was mainly due to an increase of ¥3,550 million in loss on retirement of non-current assets and ¥7,097 million in loss on sale of shares of subsidiaries and associates.

# Cash Flow Conditions

Cash and cash equivalents (hereinafter "net cash") at the end of the fiscal year under review amounted to ¥185,592 million, up ¥58,707 million compared to the end of the previous fiscal year.

The following is a summary of cash flow activities.

# **1** Cash Flows from Operating Activities

Net cash provided by operating activities totaled ¥108,372 million (versus ¥38,954 million in the previous fiscal year). This primarily reflected the cash inflow factors of ¥52,715 million in depreciation and amortization and ¥59,252 million in profit before income taxes, partially offset by the cash outflow factors of an increase of ¥1,922 million in notes and accounts receivable and an increase of ¥17,601 million in inventories.

Introduction



Accordingly, profit before income taxes amounted to ¥59,252 million (an increase of 84.2% year-on-year).

# 4 Income Taxes (Including Income Taxes – Deferred)

Income taxes increased from ¥6,246 million in the previous fiscal year to ¥17,688 million in the fiscal year under review.

Accordingly, profit amounted to ¥41,563 million (an increase of 60.4% year-on-year).

# 5 Profit Attributable to Non-Controlling Interests

Profit attributable to non-controlling interests increased from ¥220 million in the previous fiscal year to ¥331 million in the fiscal year under review.

# 6 Profit Attributable to Owners of Parent

Profit attributable to owners of parent was ¥41,232 million (an increase of 60.4% year-on-year).

Basic earnings per share was ¥295.35. Return on equity (ROE) stood at 12.12%.

# 2 Cash Flows from Investing Activities

Net cash used in investing activities totaled ¥67,722 million (versus ¥82,345 million used in the previous fiscal year). This was mainly due to a decrease of ¥66,200 million for purchases of property, plant and equipment.

#### **3** Cash Flows from Financing Activities

Net cash provided by financing activities totaled ¥13,935 million (versus ¥6,236 million in net cash used in the previous fiscal year). This was mainly due to an increase of ¥35,000 million in proceeds from issuance of bonds, partially offset by a decrease of ¥15,000 million in redemption of bonds and a decrease of ¥5,595 million in cash dividends paid.

# **Consolidated Balance Sheet**

|  | Millions             | Thousands of<br>U.S. dollars<br>(Note) |                          |  |
|--|----------------------|--|--------------------------|--|
|  | 2022                 | 2021                                   | 2022                     |  |
| Assets                                       |                      |  |                          |  |
| Current assets:                              |                      |  |                          |  |
| Cash and deposits                            | ¥ 185,592            | ¥ 126,885                              | \$ 1,516,152             |  |
| Notes and accounts receivable:               |                      |  |                          |  |
| Trade  | 92,083               | 89,796                                 | 752,251                  |  |
| Other  | 5,148                | 6,063                                  | 42,059                   |  |
| Allowance for doubtful accounts              | (94)                 | (109)                                  | (768)                    |  |
| Inventories:                                 |                      |  |                          |  |
| Merchandise and finished goods               | 26,823               | 13,653                                 | 219,120                  |  |
| Work in process                              | 19,786               | 18,735                                 | 161,634                  |  |
| Raw materials and supplies                   | 27,960               | 24,636                                 | 228,412                  |  |
| Other current assets                         | 5,972                | 5,706                                  | 48,790                   |  |
| Total current assets                         | 363,270              | 285,365                                | 2,967,650                |  |
|  |                      |  |                          |  |
| Property, plant and equipment:               |                      |  |                          |  |
| Land   | 20,108               | 19,972                                 | 164,269                  |  |
| Buildings and structures                     | 216,977              | 213,557                                | 1,772,542                |  |
| Machinery and equipment                      | 503,270              | 471,579                                | 4,111,345                |  |
| Leased assets                                | 636                  | 566                                    | 5,192                    |  |
| Construction in progress                     | 34,014               | 38,590                                 | 277,869                  |  |
| Accumulated depreciation and impairment loss | 775,005<br>(549,084) | 744,264<br>(529,436)                   | 6,331,217<br>(4,485,614) |  |
| Property, plant and equipment, net           | 225,921              | 214,828                                | 1,845,603                |  |
|  |                      |  |                          |  |

| Investment securities:                     |           |           |              |
|--|-----------|-----------|--------------|
| Unconsolidated subsidiaries and affiliates | 26        | 25        | 214          |
| Other                                      | 64,612    | 68,173    | 527,833      |
| Long-term loans receivable                 | 8         | 9         | 69           |
| Deferred tax assets                        | 3,951     | 3,488     | 32,280       |
| Other assets                               | 6,793     | 6,873     | 55,486       |
| Allowance for doubtful accounts            | (248)     | (242)     | (2,025)      |
| Total investments and other assets         | 75,142    | 78,326    | 613,857      |
| Total assets                               | ¥ 664,333 | ¥ 578,519 | \$ 5,427,110 |

|   | Millions  | U.S. dollars<br>(Note) |              |
|---|-----------|------------------------|--------------|
|   | 2022      | 2021                   | 2022         |
| Liabilities and Net Assets  |           |                        |              |
| Current liabilities:  |           |                        |              |
| Short-term borrowings and<br>current portion of long-term debt              | ¥ 40,030  | ¥ 35,131               | \$ 327,016   |
| Notes and accounts payable:   |           |                        |              |
| Trade   | 47,174    | 42,564                 | 385,378      |
| Other   | 27,061    | 29,254                 | 221,070      |
| Lease obligations   | 135       | 395                    | 1,101        |
| Accrued expenses  | 7,055     | 5,915                  | 57,637       |
| Income taxes payable  | 14,910    | 5,624                  | 121,800      |
| Accrued bonuses for employees   | 5,385     | 4,803                  | 43,990       |
| Accrued bonuses for directors<br>and audit and supervisory board<br>members | 173       | 155                    | 1,413        |
| Provision for loss on liquidation of<br>subsidiaries and affiliates         | 177       | 225                    | 1,444        |
| Other current liabilities   | 14,061    | 7,834                  | 114,867      |
| Total current liabilities   | 156,161   | 131,900                | 1,275,716    |
|   |           |                        |              |
| Long-term liabilities:  |           |                        |              |
| Long-term debt  | 130,000   | 115,044                | 1,062,005    |
| Lease obligations   | 200       | 172                    | 1,633        |
| Liability for retirement benefits   | 579       | 1,079                  | 4,729        |
| Provision for share-based   | 493       | 353                    | 4,028        |
| compensation<br>Deferred tax liabilities                                    | 5,095     | 7,118                  | 41,626       |
| Other long-term liabilities   | 1,077     | 990                    | 8,793        |
| Total long-term liabilities   | 137,444   | 124,756                | 1,122,814    |
|   | ,         | 12 11/ 00              | .,,          |
| Net Assets:   |           |                        |              |
| Shareholders' equity:   |           |                        |              |
| Common stock:   |           |                        |              |
| Authorized – 230,000,000<br>shares  |           |                        |              |
| Issued – 140,860,557 shares<br>in 2022 and 2021                             | 64,152    | 64,152                 | 524,080      |
| Capital surplus   | 64,494    | 64,433                 | 526,871      |
| Retained earnings   | 184,612   | 149,380                | 1,508,146    |
| Less treasury stock, at cost  | (3,265)   | (3,286)                |              |
| Total shareholders' equity  | 309,993   | 274,679                | 2,532,425    |
| Accumulated other   |           |                        |              |
| comprehensive income:<br>Net unrealized holding gain on                     | 26,626    | 28,639                 | 217,516      |
| other securities<br>Surplus arising from land                               |           |                        |              |
| revaluation   | 160       | 160                    | 1,308        |
| Translation adjustments<br>Total accumulated other                          | 27,796    | 12,436                 | 227,069      |
| comprehensive income  | 54,582    | 41,235                 | 445,893      |
| Non-controlling interests   | 6,153     | 5,949                  | 50,262       |
| Total net assets  | 370,728   | 321,863                | 3,028,580    |
| Total liabilities and net assets  | ¥ 664,333 | ¥ 578,519              | \$ 5,427,110 |
|   |           |                        |              |

Thousands of

# Consolidated Statement of Income

|  | Millions  | Thousands of<br>U.S. dollars<br>(Note) |              |
|--|-----------|--|--------------|
|  | 2022      | 2021                                   | 2022         |
| Net sales                                    | ¥ 401,139 | ¥ 323,461                              | \$ 3,277,011 |
| Cost of sales                                | 281,059   | 238,011                                | 2,296,047    |
| Gross profit                                 | 120,080   | 85,450                                 | 980,964      |
| Selling, general and administrative expenses | 49,259    | 46,815                                 | 402,407      |
| Operating income                             | 70,821    | 38,635                                 | 578,557      |

| Other income (expenses):                      |          |         |           |
|---|----------|---------|-----------|
| Interest and dividend income                  | 1,411    | 1,222   | 11,524    |
| Interest expense                              | (281)    | (258)   | (2,292)   |
| Gain (loss) on sales of investment securities | 91       | 65      | 742       |
| Other, net                                    | (12,790) | (7,498) | (104,482) |
| Profit before income taxes                    | 59,252   | 32,166  | 484,049   |
|   |          |         |           |

Income taxes:

| Current                   | (19,049)   | (8,070)          | (155,614) |
|---------------------------|------------|------------------|-----------|
| Deferred                  | 1,360      | 1,823            | 11,110    |
|                           | (17,689)   | (6,247)          | (144,504) |
| Profit                    | 41,563     | 25,919           | 339,545   |
| Profit attributable to:   |            |                  |           |
| Non-controlling interests | (330)      | (220)            | (2,705)   |
| Owners of parent          | ¥ 41,233 ¥ | 25,699 <b>\$</b> | 336,840   |

Note : U.S. dollar amounts have been converted for convenience only at the rate of ¥122.41 = US\$1, the rate of exchange on March 31,2022.



# Consolidated Statement of Comprehensive Income

|  | Millions | Thousands of<br>U.S. dollars<br>(Note) |            |
|--|----------|--|------------|
|  | 2022     | 2021                                   | 2022       |
| Profit   | ¥ 41,563 | ¥ 25,919                               | \$ 339,545 |
| Other comprehensive income (loss):                     |          |  |            |
| Net unrealized holding gain (loss) on other securities | (1,989)  | 19,472                                 | (16,248)   |
| Translation adjustments                                | 15,377   | 8,267                                  | 125,621    |
| Total other comprehensive income (loss)                | 13,388   | 27,739                                 | 109,373    |
| Comprehensive income (loss)                            | ¥ 54,951 | ¥ 53,658                               | \$ 448,918 |
|  |          |  |            |
| Comprehensive income (loss) attributable to:           |          |  |            |
| Owners of parent                                       | ¥ 54,580 | ¥ 53,349                               | \$ 445,878 |
| Non-controlling interests                              | 371      | 309                                    | 3,040      |

# **Consolidated Financial Statements**

# Consolidated Statement of Changes in Net Assets

| Millions of yen  |  |                 |                    |                   |                               |   |  |                         |                                  |                     |
|--|--|-----------------|--------------------|-------------------|-------------------------------|---|--|-------------------------|----------------------------------|---------------------|
|  | Number of<br>shares<br>issued<br>(Thousands) | Common<br>stock | Capital<br>surplus | Retained earnings | Treasury<br>stock, at<br>cost | Net<br>unrealized<br>holding gain<br>on other<br>securities | Surplus<br>arising from<br>land<br>revaluation | Translation adjustments | Non-<br>controlling<br>interests | Total net<br>assets |
| Balance at March 31, 2020  | 140,861                                      | ¥ 64,152        | ¥ 64,579           | ¥ 128,578         | ¥ (2,575)                     | ¥ 9,232   | ¥ 160  | ¥ 4,192                 | ¥ 5,617                          | ¥ 273,935           |
| Cash dividends   | _  | _               | _                  | (4,897)           | _                             | _   | _  | _                       | _                                | (4,897)             |
| Profit attributable to<br>owners of parent   | _  | _               | _                  | 25,699            | _                             | _   | _  | _                       | _                                | 25,699              |
| Purchases of treasury<br>stock   | _  | _               | _                  | _                 | (763)                         | _   | _  | _                       | _                                | (763)               |
| Retirement of treasury stock   | _  | _               | 0                  | _                 | 52                            | _   | _  | -                       | _                                | 52                  |
| Changes in liabilities for<br>written put options over<br>non-controlling interests                | -  | -               | (146)              | _                 | -                             | -   | -  | -                       | -                                | (146)               |
| Other changes  |  | -               | -                  | -                 |                               | 19,407  | -  | 8,244                   | 332                              | 27,983              |
| Balance at March 31, 2021  | 140,861                                      | ¥ 64,152        | ¥ 64,433           | ¥ 149,380         | ¥ (3,286)                     | ¥ 28,639  | ¥ 160  | ¥ 12,436                | ¥ 5,949                          | ¥ 321,863           |
| Cumulative effects of<br>changes in accounting<br>policies   | _  | _               | _                  | (19)              | _                             | -   | _  | _                       | _                                | (19)                |
| Cash dividends   | -  | -               | -                  | (5,596)           | -                             | -   | -  | -                       | -                                | (5,596)             |
| Profit attributable to<br>owners of parent   | _  | _               | _                  | 41,233            | _                             | _   | _  | _                       | _                                | 41,233              |
| Purchases of treasury<br>stock   | _  | _               | _                  | _                 | (11)                          | _   | _  | -                       | -                                | (11)                |
| Retirement of treasury<br>stock  | _  | _               | 1                  | _                 | 32                            | _   | _  | -                       | _                                | 33                  |
| Change of scope of<br>consolidation  | _  | _               | _                  | (386)             | _                             | _   | _  | -                       | -                                | (386)               |
| Change in ownership<br>interest of parent due to<br>transactions with<br>non-controlling interests | -  | _               | 60                 | -                 | -                             | -   | -  | -                       | -                                | 60                  |
| Other changes  |  | -               | -                  | -                 | -                             | (2,013)   | -  | 15,360                  | 204                              | 13,551              |
| Balance at March 31, 2022  | 140,861                                      | ¥ 64,152        | ¥ 64,494           | ¥ 184,612         | ¥ (3,265)                     | ¥ 26,626  | ¥ 160  | ¥ 27,796                | ¥ 6,153                          | ¥ 370,728           |

# Thousands of U.S. dollars

|  | Common<br>stock | Capital<br>surplus | Retained earnings | Treasury<br>stock, at<br>cost | Net<br>unrealized<br>holding gain<br>on other<br>securities | Surplus<br>arising from<br>land<br>revaluation | Translation adjustments | Non-<br>controlling<br>interests | Total net<br>assets |
|--|-----------------|--------------------|-------------------|-------------------------------|---|--|-------------------------|----------------------------------|---------------------|
| Balance at March 31, 2021  | \$ 524,080      | \$ 526,375         | \$ 1,220,325      | \$ (26,847)                   | \$ 233,956  | \$ 1,308                                       | \$ 101,591              | \$ 48,599                        | \$ 2,629,387        |
| Cumulative effects of<br>changes in accounting<br>policies   | _               | _                  | (155)             | _                             | _   | -  | _                       | _                                | (155)               |
| Cash dividends   | _               | _                  | (45,715)          | -                             | -   | -  | _                       | -                                | (45,715)            |
| Profit attributable to<br>owners of parent   | _               | _                  | 336,840           | _                             | -   | _  | _                       | -                                | 336,840             |
| Purchases of treasury stock  | _               | _                  | _                 | (91)                          | -   | _  | _                       | -                                | (91)                |
| Retirement of treasury stock   | _               | 7                  | _                 | 266                           | -   | _  | _                       | -                                | 273                 |
| Change of scope of<br>consolidation  | _               | _                  | (3,149)           | _                             | _   | _  | _                       | -                                | (3,149)             |
| Change in ownership<br>interest of parent due to<br>transactions with<br>non-controlling interests | _               | 489                | _                 | _                             | -   | -  | _                       | -                                | 489                 |
| Other changes  | _               | _                  | -                 | _                             | (16,440)  | -  | 125,478                 | 1,663                            | 110,701             |
| Balance at March 31, 2022  | \$ 524,080      | \$ 526,871         | \$ 1,508,146      | \$ (26,672)                   | \$217,516   | \$ 1,308                                       | \$ 227,069              | \$ 50,262                        | \$ 3,028,580        |

# Consolidated Statement of Cash Flows

|  | 2022              | 2021                | 2022       |
|--|-------------------|---------------------|------------|
| Operating activities   |                   |                     |            |
| Profit before income taxes   | ¥ 59,252          | ¥ 32,166            | \$ 484,049 |
| Adjustments to reconcile profit before income taxes to net cash provided by operating activities:  |                   |                     |            |
| Depreciation and amortization  | 52,715            | 35,413              | 430,64     |
| Loss on impairment of fixed assets   | 1,219             | 4,069               | 9,95       |
| Reversal for accrued bonuses for employees   | 582               | 894                 | 4,75       |
| Reversal for accrued bonuses for directors   | 18                | 23                  | 14         |
| Reversal of allowance for doubtful accounts  | (10)              | (29)                | (8         |
| Increase (decrease) in liability for retirement benefits   | (500)             | 195                 | (4,08      |
| Interest and dividend income   | (1,411)           | (1,222)             | (11,52     |
| Interest expense   | 281               | 258                 | 2,29       |
| Share of profit of entities accounted for using equity method                                      | (2)               | (1)                 | (1         |
| Gain on sales of property, plant and equipment   | (136)             | (75)                | (1,11      |
| Loss on disposal of property, plant and equipment  | 6,113             | 2,563               | 49,93      |
| Gain (loss) on sales of investment securities  | (91)              | (65)                | (74        |
| Loss on sales of shares of subsidiaries and associates   | 7,098             | _                   | 57,98      |
| Loss (gain) on valuation of investment securities  | 630               | 30                  | 5,15       |
| Decrease (increase) in notes and accounts receivable, trade  | (1,922)           | (17,722)            | (15,70     |
| Decrease (increase) in inventories   | (17,602)          | (9,969)             | (143,79    |
| Increase (decrease) in notes and accounts payable  | 4,368             | (1,450)             | 35,68      |
| Increase (decrease) in accrued expenses  | 1,140             | (238)               | 9,31       |
| Other, net   | 5,734             | (1,304)             | 46,83      |
| Subtotal   | 117,476           | 43,536              | 959,69     |
| Interest and dividends received  | 1,411             | 1,222               | 11,53      |
| Interest paid  | (280)             | (258)               | (2,29      |
| Income taxes paid  | (10,234)          | (5,545)             | (83,60     |
| Net cash provided by operating activities  | ¥ 108,373         | ¥ 38,955            | \$ 885,32  |
| Investing activities   |                   |                     |            |
| Purchases of property, plant and equipment   | ¥ (66,200)        | ¥ (75,350)          | \$ (540,80 |
| Proceeds from sales of property, plant and equipment   | 433               | 638                 | 3,53       |
| Purchases of intangible assets   | (1,014)           | (1,173)             | (8,28      |
| Purchases of investment securities   | (36)              | (6,199)             | (29        |
| Proceeds from sales of investment securities   | 225               | 96                  | 1,84       |
| Purchase of shares of subsidiaries resulting in change in scope of consolidation                   | -                 | (584)               | -          |
| Sale of shares of subsidiaries resulting in change in scope of consolidation                       | (1,164)           | _                   | (9,51      |
| Increase in short-term loans receivable  | -                 | 0                   | -          |
| Collection of long-term loans receivable   | 0                 | 0                   |            |
| Other, net   | 33                | 227                 | 27         |
| Net cash used in investing activities  | (67,723)          | (82,345)            | (553,24    |
| Financing activities   |                   |                     |            |
| Increase in short-term borrowings, net   | (101)             | (37)                | (82        |
| Increase in long-term debt   | _                 | 10,009              | -          |
| Repayment of long-term debt  | (44)              | (10,000)            | (36        |
| Proceeds from issuance of bonds  | 35,000            | _                   | 285,92     |
| Redemption of bonds  | (15,000)          | _                   | (122,53    |
| Purchases of treasury stock  | (11)              | (763)               | (9         |
| Proceeds from sales of treasury stock  | 33                | 52                  | 27         |
| Cash dividends paid  | (5,596)           | (4,897)             | (45,71     |
| Cash dividends paid to non-controlling interests   | (49)              | (1,567)             | (10,71     |
| Repayments of lease obligations  | (233)             | (586)               | (1,90      |
| Other, net   | (64)              | (556)               | (1,50      |
| Net cash (used in) provided by financing activities  | 13,935            | (6,237)             | 113,84     |
| Effect of exchange rate changes on cash and cash equivalents                                       | 4,122             | 1,628               | 33,67      |
|  |                   |                     |            |
|  | 58 707            |                     |            |
| Increase (decrease) in cash and cash equivalents<br>Cash and cash equivalents at beginning of year | 58,707<br>126,885 | (47,999)<br>174,884 | 479,59     |



Thousands of U.S. dollars (Note) Millions of yen

Note : U.S. dollar amounts have been converted for convenience only at the rate of ¥122.41 = US\$1, the rate of exchange on March 31,2022.

# Corporate Information / Stock Information (As of March 31, 2022)

# **Corporate Data**

| Trade name             | IBIDEN CO., LTD.  | Fiscal   |
|------------------------|---|--|
| Established            | November 25, 1912   | Annual   |
| Capital                | ¥64,152 million   | shareh   |
| Number of employees    | Consolidated: 12,958<br>Non-consolidated: 3,549   | Indepe<br>Audito                               |
| Plants                 | Head office 2-1, Kanda-cho, Ogaki City, Gifu 503-<br>8604, Japan<br>Tokyo branch Marunouchi Bldg. 29F, 2-4-1,<br>Marunouchi, Chiyoda-ku, Tokyo 100-6329,<br>Japan<br>Plants Gifu Prefecture: Ogaki, Ogaki Central,<br>Aoyanagi, Gama, Ogaki-Kita, Godo<br>Aichi Prefecture: Kinuura | Domes<br>exchar<br>Date o<br>divider<br>Author |
| Number of subsidiaries | Consolidated subsidiaries: 34<br>(15 in Japan, 19 overseas)   | Shares<br>outsta                               |
|                        |   | Numbe  |

# **Stock Information**

| Figure 1 year and                     | March 31  |
|---------------------------------------|---|
| Fiscal year-end                       | March 31  |
| Annual meeting of<br>shareholders     | June  |
| Independent<br>Auditors               | KPMG AZSA LLC   |
| Domestic stock<br>exchange listings   | Tokyo Stock Exchange, Prime<br>Market<br>Nagoya Stock Exchange, Premier<br>Market |
| Date of record for<br>dividend payout | Interim dividend: September 30<br>Year-end dividend: March 31                     |
| Authorized shares                     | 230,000,000   |
| Shares issued and outstanding         | 140,860,557 (including 962,013 shares of treasury stock)                          |
| Number of shareholders                | 30,000  |

# **Disclosure of Financial Information**

External Corporate Evaluation regarding ESG

IBIDEN takes steps to disclose information at appropriate times to shareholders and investors in a fair, accurate, and easy-to-understand manner

Pursuant to the Timely Disclosure Rule of the Tokyo Stock Exchange, our information disclosure standards require the disclosure of information relevant to our operations, scope of business, and assets that could significantly affect investment judgments, as well as any changes or suspension of important corporate information that has already been published.

We will also disclose corporate information that could significantly influence investment judgments even if the Timely Disclosure Rule does not apply, as accurately, promptly and appropriately as possible.

#### (As of the end of September, 2022)



- FTSE4Good: http://www.ftse.com/products/indices/FTSE4Good FTSE Blossom Japan Index and FTSE Blossom Japan Sector Relative Index: http://www.ftse.com/products/indices/blossom-japan
- \*2 The inclusion of IBIDEN Co., Ltd. in any MSCI index, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement of promotion of IBIDEN Co., Ltd. by MSCI or any of its affiliates. The MSCI indexes are the exclusive property of MSCI. MSCI and the MSCI index names and logos are trademarks or service marks of MSCI or its

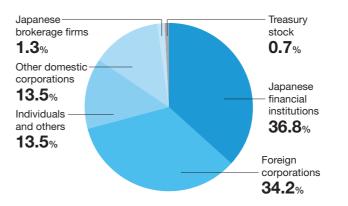
3 The use by IBIDEN Co., Ltd. of any MSCI ESG RESEARCH LLC or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of IBIDEN Co., Ltd. by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.



#### Name of Shareholder

| The Master Trust Bank of Japan, Ltd. (Trust Account) |
|--|
| Custody Bank of Japan, Ltd. (Trust Account)          |
| Toyota Industries Corporation                        |
| The Ogaki Kyoritsu Bank, Ltd.                        |
| The Juroku Bank, Ltd.                                |
| IBIDEN Partner Shareholding Association              |
| DENSO Corporation                                    |
| TAIJU LIFE INSURANCE COMPANY LIMITED                 |
| IBIDEN Employee Shareholding Association             |
| Sumitomo Mitsui Banking Corporation                  |

# Breakdown by Type of Shareholder



# Stock Price Range and Trading Volume (Common Stock)





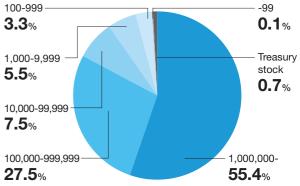
Website for shareholders and

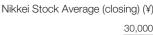
ESG Management



| The number of shares held<br>(thousands) | Percentage of owned shares to outstanding shares (%) |
|--|--|
| 19,788                                   | 14.14  |
| 10,115                                   | 7.23   |
| 6,221                                    | 4.45   |
| 4,150                                    | 2.97   |
| 4,130                                    | 2.95   |
| 4,065                                    | 2.91   |
| 2,712                                    | 1.94   |
| 2,539                                    | 1.82   |
| 2,326                                    | 1.66   |
| 2,308                                    | 1.65   |
|  |  |

# Breakdown by Size of Holding







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