





# We will answer society's call with “Trust”

— This is our policy

We, DAISHINKU CORP., have been committed to maintaining the following three types of trust since our founding: trusted people, trusted products, and trusted company.

Under this policy, we will continue to be a company that meets the expectations of society in terms of harmony with the environment, provision of new services, and continuous profit generation.

## On Publishing the Integrated Report

Since 2016, we have issued the CSR Report to share with stakeholders our initiatives to enhance corporate value and realize a sustainable society. Yet, starting in 2023, we have decided to issue the Integrated Report instead to share with you our value creation story based on the 10-year Long-term Business Plan “OCEAN+2 Strategy” along with our initiatives to address social issues through our business activities, covering both financial and non-financial information.

It is our hope that this Integrated Report will help you understand the details of our initiatives, including the environment surrounding the Company, our future vision, and the value we will create.

## Cautionary note on forward-looking statements

This report includes forecasts and other forward-looking statements about DAISHINKU's corporate plans, strategies, and financial performance, based on information available to the Company as of the publication date. Therefore, these forward-looking statements entails risks and uncertainties. Readers should be aware that fluctuations in various factors could result in outcomes that differ materially from those presented in these statements.

## Reportable organizations

DAISHINKU CORP. and its consolidated subsidiaries in Japan and overseas.

## Reporting period

April 1, 2022 to March 31, 2023  
(including some information outside of this reporting period)

## Published

November 2023



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# Our Corporate Motto: "Trust"

## Our Vision

### Evolving from management philosophy to corporate philosophy

We have so far been engaged in our business under the management philosophy of "Reliance is the policy we offer for all our customers worldwide." From this fiscal year ended March 31, 2023 onward, we have evolved this management philosophy into the corporate philosophy of "We will answer society's call with trust" with the aim of contributing not only to our customers but also our employees and the rest of our stakeholders, as well as the sustainability of our planet and society. We will work toward achieving various visions as a sustainable company, placing this new corporate philosophy at the top of the "pyramid of trust."

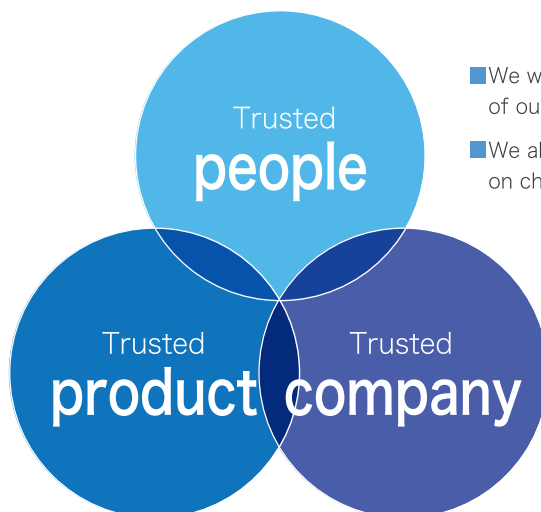
### Pyramid of Trust





# Three Types of Trust

- We always create the best products and services.
- We provide new value and help realize a safe, affluent society.



- We work with a sincere attitude in consideration of our connection with society.
- We always have a dream and continue to take on challenges.

- We work to be in harmony with the environment and enhance corporate governance.
- We aim to contribute to society in a sustainable manner by continuously generating profits.

# The Three Blues



## "Challenge" Blue

Kindness and boldness we create new waves with.



## "Growth" Blue

Deep blue ocean we embark into that is uncharted.



## "Trust" Blue

Skies we go beyond to reach out to the world.

We categorize our corporate color blue into three distinct attributes: Challenge Blue, Growth Blue, and Trust Blue, collectively designating them as the Three Blues.

Our initiatives for value creation based on the 10-year Long-term Business Plan "Ocean+2 Strategy" outlined in this report are linked to these Three Blues. Each initiative is marked with the corresponding icon presented above.



Kazuo Hasegawa,  
the Founder of the Company



Calligraphy written by the Founder



# Our History of Change

Net sales  
(Millions of yen)

50,000

40,000

30,000

20,000

10,000

0

1965 1970 1975 1980 1985 1990 1995



Monument commemorating the place of establishment / Kakogawa, Hyogo

Plaza Accord

CB radio boom

Absence of a leader in the quartz crystal device industry

Asian

Release of quartz crystal clocks and watches on the market

Widespread adoption of video devices, home video game consoles, and other consumer equipment

- **1959** Founded as Daiwa Shinku Kogyosho
- **1965** Started mass production of crystal resonator parts

- **1974** Established Ichikawa Plant (current Kanzaki Plant) to start mass production of synthetic quartz crystals
- **1977** Established DAISHINKU (AMERICA) CORP. to start the Company's first overseas sales
- **1989** Established PT. KDS INDONESIA to start the Company's first overseas production

Early mass-produced crystal resonators



Model: 18/U

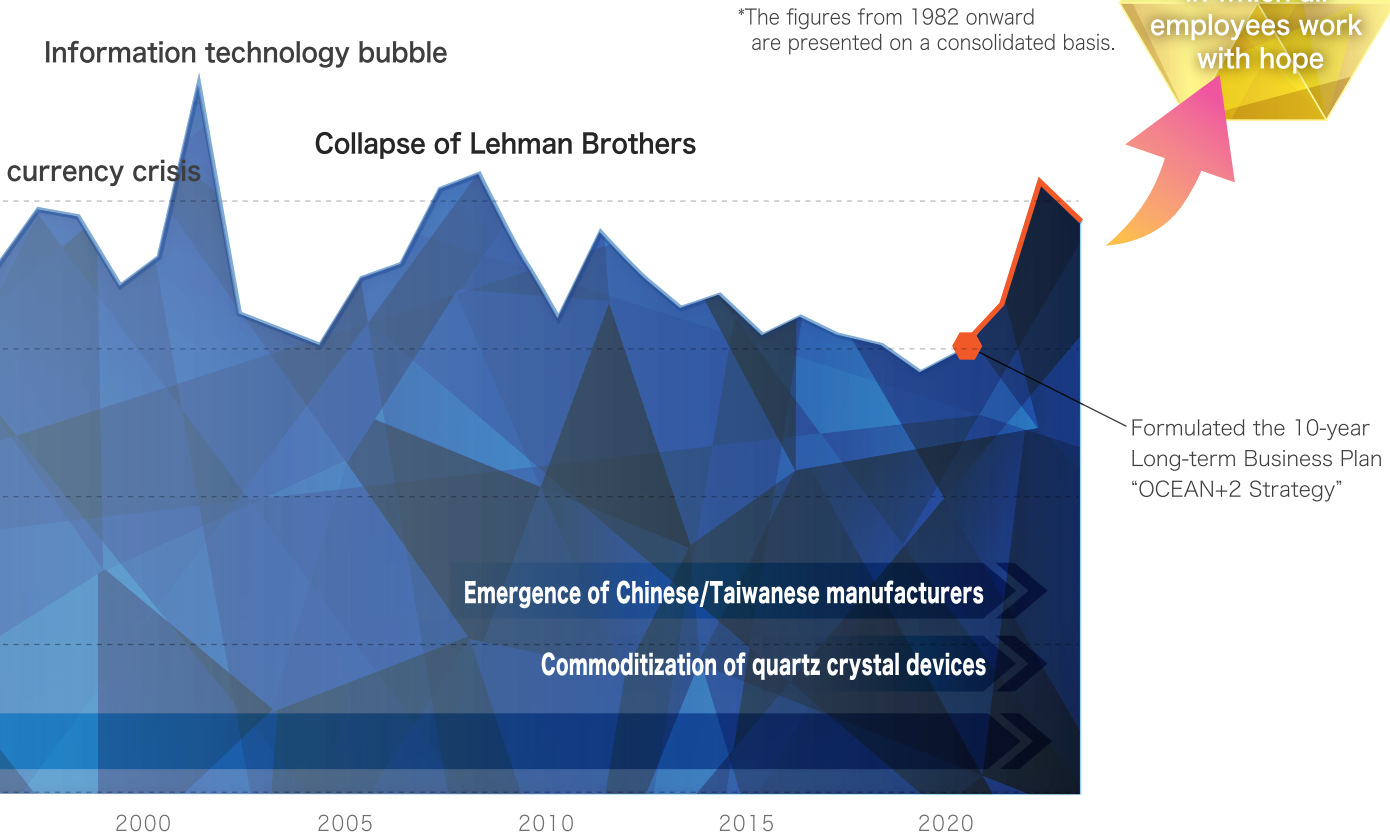


Model: 6/W



Team members involved in the production startup of synthetic quartz crystals





Enhanced presence of mobile phones/digital products → Widespread adoption of smartphones → Toward a "connected" society

- **1995** Expanded the floor space of the Tottori Production Division to fully launch the telecommunication business
- **2003** Increased sales of optical low-pass filters and crystal resonator DSX321G



Tottori Production Division

- **2012** Started domestic production by the photolithography method
- **2017** Developed the Arkh.3G series
- **2019** Formulated the 10-year Long-term Business Plan "OCEAN+2 Strategy"
- **2022** Mass-produced synthetic quartz crystals for 6-inch wafers



Synthetic quartz crystals for 6-inch wafers

# Risks, Opportunities and Material Issues

To ensure our growth as a sustainable company, we will leverage our strengths to address material issues, striking a balance between stable supply in our business domain and environmental initiatives in the environmental domain. For example, the Arkh series, which enables fully-automatic production, and enlarged quartz crystal wafers, which significantly improve production efficiency, along with other inherent strengths of the Company, contribute to addressing various challenges arising from the shortage of workforce.

As these initiatives are linked to the 10-year Long-term Business Plan "OCEAN+2 Strategy" and our conventional businesses, the Company's growth will lead to the realization of our management vision and long-term vision.





**strengths and initiatives**      **Material issues**      **Future we aspire to**

**OCEAN+2 Strategy 7** basic strategies

- O**ne      Single supplier
- C**ost      Challenge to lower cost area
- E**lement      Core technology: growth and cutting/polishing of crystal
- A**lliance      Alliance
- N**iche      Advantage of being a survivor
- +1**      New crystals
- +2**      New devices

**Conventional businesses**

Work with **pleasure**      Work with **comfort**

**Growth**      **Trust**

Purpose  
technologies that are indispensable to society

Philosophy  
call with "Trust"

**Sustainability in the business domain**

- Technological innovation and value creation
- Sound supply chain

**Stable supply**

**Sustainability in the environmental domain**

- Response to environmental (reduction of CO<sub>2</sub>) concerns

**Environmental initiatives**

**Fundamentals of corporate activities**

- Ingraining our corporate philosophy and purpose
- Maximization of human capital

**Sustainable growth**

**Long-term Vision**

To become a leading company always needed by customers with high standard of technologies and strong corporate capabilities, thereby achieving **a 10 billion yen operating profit**

**Management Vision**

With "trust" as our slogan, we aim to become a company in which all employees work with hope while nurturing the spirit of valuing "connections between people."

# Company Profile

Net sales  
**¥38,430** million

Operating profit  
**¥4,210** million

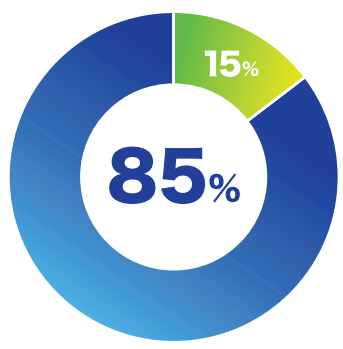
Profit attributable to owners of parent  
**¥3,208** million

Operating profit to net sales  
**11.0** %

ROE  
**9.3** %

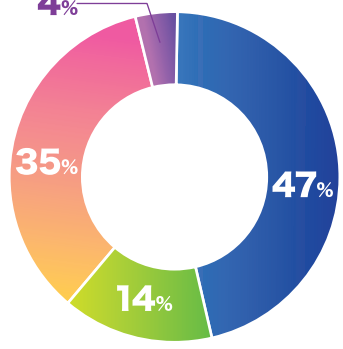
ROIC  
**4.1** %

## Overseas sales ratio



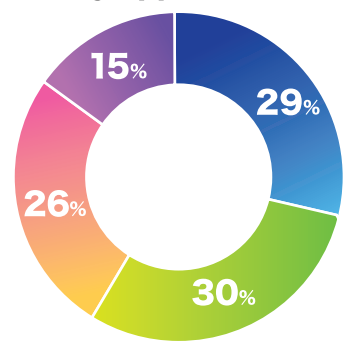
■ Japan ■ Overseas

## Net sales by model



■ Crystal resonators ■ Tuning fork crystal resonators  
■ Crystal applied products ■ Other

## Percentage of sales by application



■ Telecommunications ■ Automotive  
■ Consumer ■ Industrial

## Status by region

**Europe**

Net sales: ¥3,654 million  
Segment profit: ¥52 million  
Sales subsidiary: DAISHINKU (DEUTSCHLAND) GmbH  
Number of employees: 21

**China**

Net sales: ¥13,042 million  
Segment profit: ¥538 million  
Sales subsidiaries: SHANGHAI DAISHINKU INTERNATIONAL TRADING CO., LTD.  
DAISHINKU (HK) LTD.  
Production subsidiaries: TIANJIN KDS CORP.  
HARMONY ELECTRONICS CORP. (Dong Guan)  
HARMONY ELECTRONICS CORP. (Shenzhen)  
Number of employees: 649

**North America**

Net sales: ¥1,755 million  
Segment profit: ¥2 million  
Sales subsidiary: DAISHINKU (AMERICA) CORP.  
Number of employees: 8

**Asia**

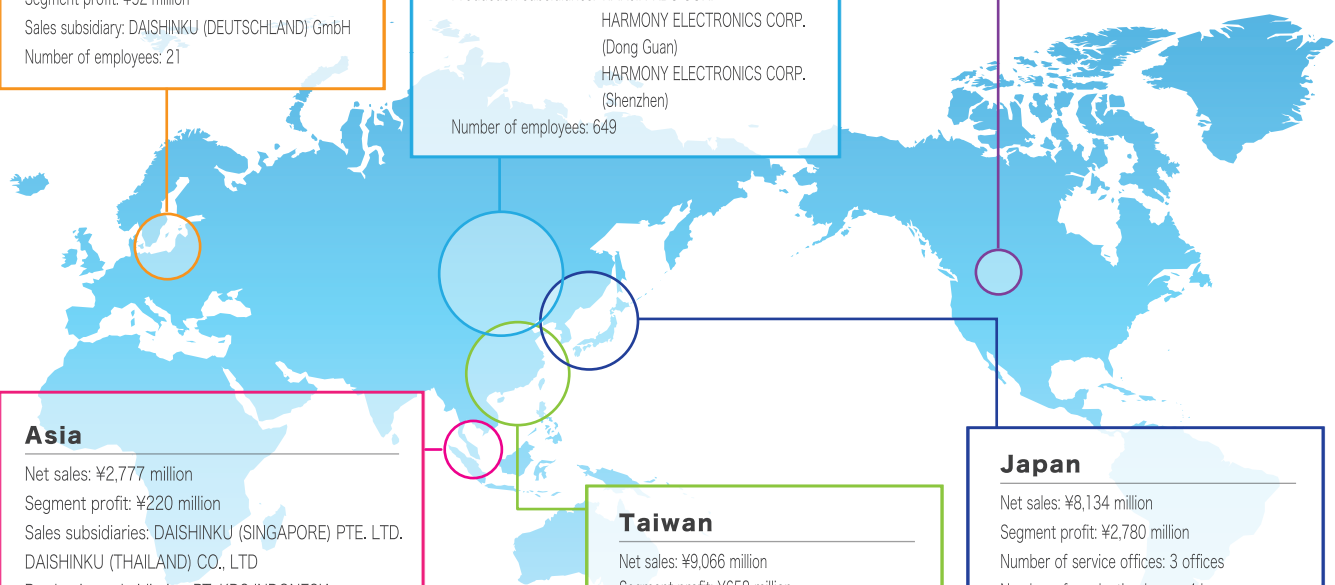
Net sales: ¥2,777 million  
Segment profit: ¥220 million  
Sales subsidiaries: DAISHINKU (SINGAPORE) PTE. LTD.  
DAISHINKU (THAILAND) CO., LTD  
Production subsidiaries: PT. KDS INDONESIA  
HARMONY ELECTRONICS (THAILAND) CO., LTD.  
Number of employees: 1,115

**Taiwan**

Net sales: ¥9,066 million  
Segment profit: ¥658 million  
Sales/production subsidiary: HARMONY ELECTRONICS CORP.  
Number of employees: 840

**Japan**

Net sales: ¥8,134 million  
Segment profit: ¥2,780 million  
Number of service offices: 3 offices  
Number of production bases: 4 bases  
Production subsidiary: Kyushu Daishinku Corp.  
Number of employees: 717







## Roles and applications of crystal devices

A crystal device refers to a type of timing device, which is:

- Primarily made of artificial crystals, which can be manufactured in large, industrially stable quantities, and
- Able to continue emitting the same signal (frequency) stably even if the ambient temperature changes.

Due to these material and physical characteristics, crystal devices are most commonly used as timing devices.

The role of timing devices is to create stable reference signals required by semiconductors (and ICs). The accurate and stable reference signals provided by crystal devices enable smooth data transmission and accurate time display. Crystal devices are used in various applications that require digital control, from everyday items to industrial equipment, such as smartphones, automobiles, medical equipment, and industrial robots. Semiconductors are called the “rice of industry” because they are indispensable for the digital society, whereas crystal devices are called the “salt of industry” because they support our lives. We will continue to build our presence in the crystal device market, supporting the future of our customers and society with people, services, and digital technology.

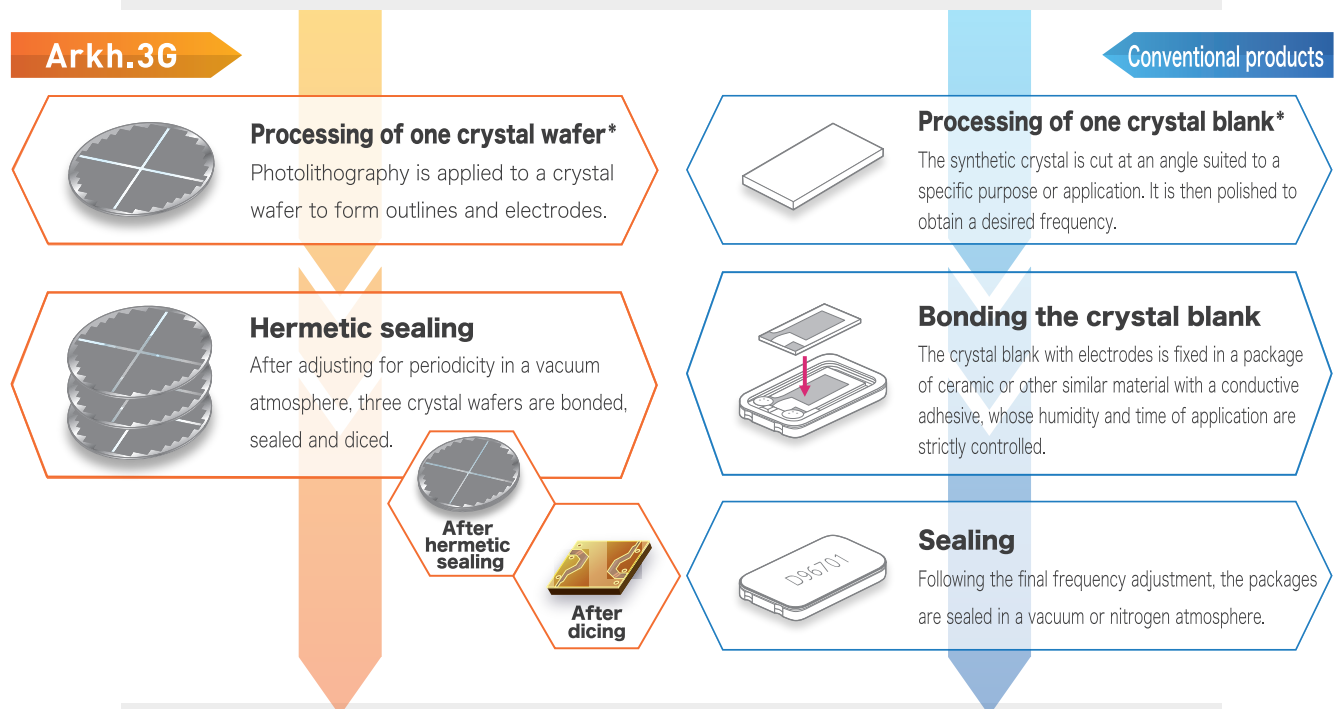
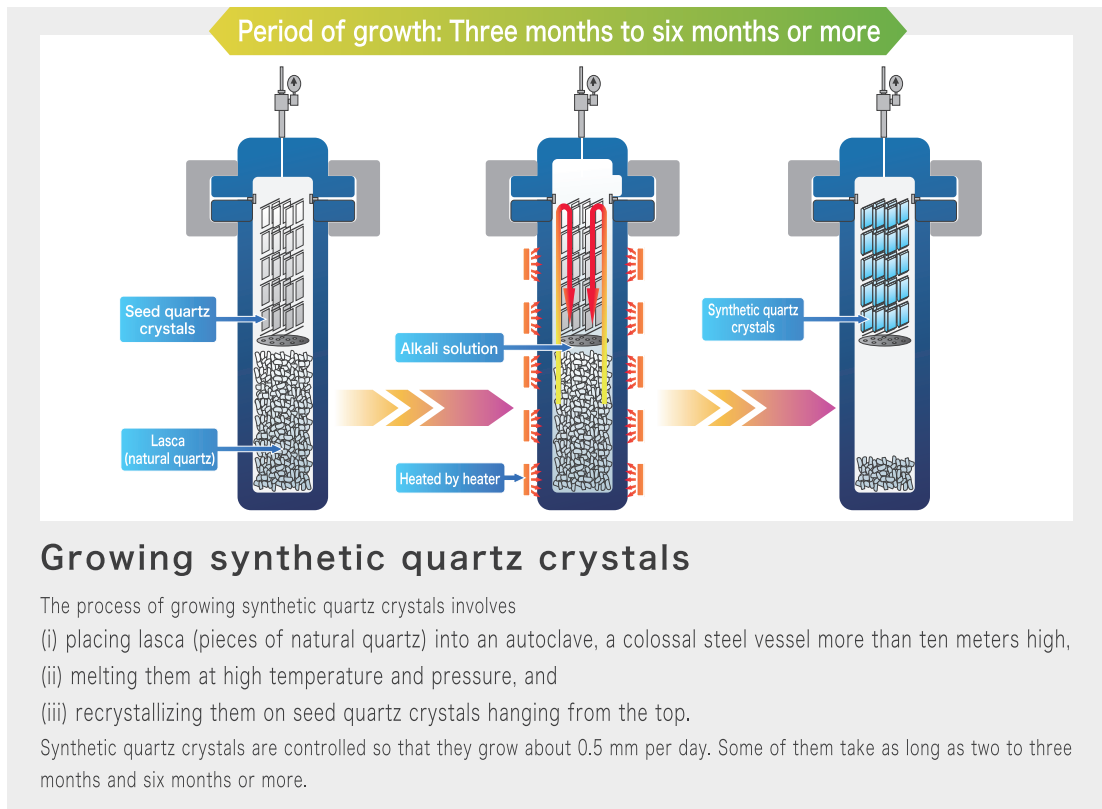
### What if quartz crystal devices no longer existed?

For general automobiles, not only will all functions such as automatic driving and other driver assistance systems, smart keys, and navigation systems, be turned off, but you will not be able to even start the engine to move the automobile. Smartphones will no longer be able to make calls or get location information, wireless earphones will no longer be able to hear sounds, and batteries will quickly run out, making our lives extremely inconvenient. Quartz crystal devices are an essential reference signal source for our lives.



# Company Profile

## How a crystal device is made



### Inspecting, packaging and shipping products

The crystal devices are inspected to check their conformity to all the required specifications, which number several dozens of items. Only the products that have passed this most stringent inspection are packaged and shipped.

#### \*What is a crystal wafer?

A crystal wafer is a substrate (thin quartz crystal plate) cut out from a quartz crystal gemstone and used primarily in photolithography.

#### \*What is a crystal blank?

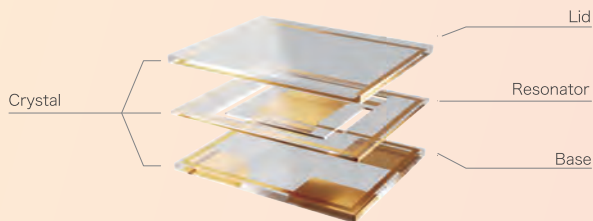
A crystal blank is a quartz crystal chip processed to a size that can be mounted on a package.



## Product Introduction

### Ark.3G

This device has a new, unprecedented structure developed as a third-generation device following the lead-type and surface-mounting-type products. It is an ultra-compact and thin device realized by wafer-level packaging (WLP) technology. It has a three-layer structure consisting of a lid, resonator, and base made of crystal as a mother body, in contrast to the conventional structure in which crystal blank is held in a ceramic package using a conductive adhesive.



#### Crystal Resonators

A MHz band crystal resonator with good temperature features. Available in various package types and sizes for a wide range of applications.



#### Tuning fork crystal resonators

A low power consumption kHz band crystal resonator. Used for sleeping clocks and clock functions.



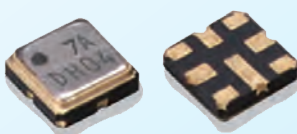
#### Crystal Oscillators

A driver IC-equipped device. Available in a variety of types: simple packaged crystal oscillator (SPXO), voltage controlled crystal oscillator (VCXO), temperature compensated crystal oscillator (TCXO), oven controlled crystal oscillator (OCXO), etc.



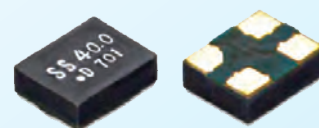
#### Monolithic Crystal Filters

A device featuring a frequency selective function that enables particular frequency components to pass through. Most commonly used for radio communication equipment.



#### Mold Oscillators

A crystal oscillator mold-packaged with a crystal resonator and IC, which can reduce the external procurement ratio and enable stable supply.



#### \*What is a mold package?

A mold package is a product that covers a quartz crystal device with an outer shell made of insulating material such as resin. The Ark series is highly flexible in package design. Using the series as a core enables to design various package sizes.

#### What size is a quartz crystal device?

A quartz crystal device is a very small product used in automobiles, smartphones, personal computers, wireless earphones, and many other applications.

Although the size varies by application or model, our most miniature product is 1.0 mm × 0.8 mm. As shown on the right, it is smaller than a grain of rice and is the world's smallest and thinnest quartz crystal device.

Our product  
(real size)



Rice grain  
(real size)





# Achieving our “Dream”

President

飯塚 実

Minoru Iizuka

## Message from the President

I believe that a company's value creation story should be a central element of its integrated report. In order to map out growth, it is necessary to have a “dream” based on our company's purpose and the unique value we provide.

There are many different types of dreams. A dream can be a far-away aspiration of something you want to do or become, which emotionally supports you as you go through life; it can be something that is difficult to achieve but not impossible



through hard work, wisdom, and solidarity; or it can be something more like a target to achieve no matter what. Our 10-year Long-term Business Plan developed in November 2019 sets the numerical target of 10 billion yen in operating profit, which is not easy to achieve but is by no means impossible. In the electronic components industry, most companies have an operating margin of 5% to 15%, but we have not set a net sales target corresponding to our operating profit target of 10 billion yen. Even if we bring in net sales of 50 billion yen, we can reach our target of 10 billion yen in operating profit, and even with net sales of 100 or 200 billion yen, it will still be attainable.

Of course, we would like to ideally secure an operating profit of 10 billion yen with as low sales as possible, but we cannot change our products in a way that will boost operating margins right away. Our approach will be to merge products with high operating margins and increase their ratio while making good use of existing assets.

However, the likelihood of achieving our goal based on a vague hope or idea alone is close to zero. In order to reach the figures in our long-term business plan, a well-thought-out strategy is necessary. Before the formulation of the long-term business plan, we already had a dream of what we wanted DAISHINKU to become in the future. We had ideas for how to realize that dream, including the ideal design of core parts, the necessary components, and a production system that meets the demands of society and takes into consideration the future labor structure of Japan.

At the time, it seemed like it would take a long time to achieve and could be considered a “dream” in the real sense. However, after overcoming various obstacles, we were able to start developing a long-term business plan exactly because we had confidence that it would be attainable. In addition to this dream, we incorporated a plan to strengthen our business capabilities and formulated the more comprehensive “OCEAN+2 Strategy.” In other words, our value creation story is about the journey—the story—to realize DAISHINKU’s dream. With a clear path and concrete goals, our story is more exciting than a vague and hazy story with no clear direction, and we believe there is a world of difference in terms of achievability.

DAISHINKU’s value creation story is clearly documented in this first-ever integrated report, so we hope you will find it interesting and take the time to read it to follow along with the story.

I have mentioned that our value creation story is based on the purpose of DAISHINKU and the demands of society. The purpose of DAISHINKU lies in its contribution to the ever-increasing number of devices that will be “connected,”

ensuring a “stable supply” to meet the growing demand. However, if we continue to increase production for a stable supply with the same approach as before without considering any other matters, CO<sub>2</sub> emissions will continue to increase linearly. In other words, “stable supply” and “environmental initiatives” are conflicting objectives, but we will reconcile them through our technological capabilities and continue to grow as a company. We believe that this, above all, is DAISHINKU’s purpose.

DAISHINKU’s value creation story has been carefully crafted to achieve this purpose. Although still a work in progress, we are making strides toward its realization.

When issuing this Integrated Report, I thought it was important to focus on conveying our thoughts on how we plan to realize our long-term business plan and how we will turn our dream into reality.

Three years have now passed since the start of the 10-year Long-term Business Plan. In this fourth year (the fiscal year ending March 31, 2024), the first stage of “Developing a foundation” will come to an end, and we are continuing with the plan based on a carefully considered strategy. We are well aware that the process will not be easy at all due to changes in the market and external environment that are beyond our control. However, since we have put a great deal of thought into the strategy, we will stand firm and not waver in the face of setbacks. Therefore, I am satisfied with the progress we have made over the past three years.

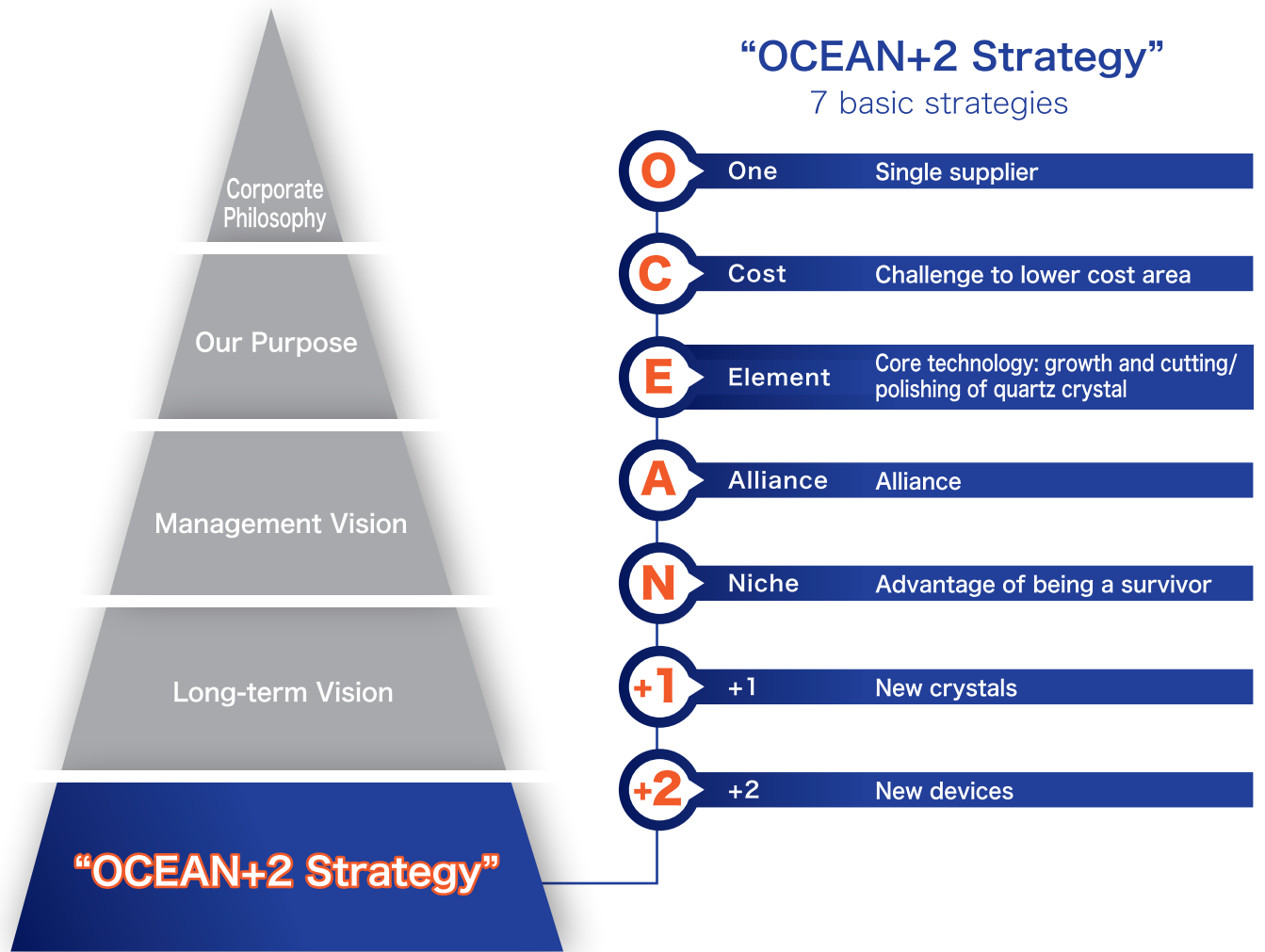
The main points we considered in developing the OCEAN+2 Strategy are as follows:

- Smaller and lighter is cheaper
- Large materials yield more products
- High-frequency, therefore low-cost devices
- Increase output per unit area
- Strengthen business capabilities
- Change work
- Continue to create products with attention to detail while evolving them
- New crystals through crystal growth technology
- New devices through our proprietary technology
- In-house CO<sub>2</sub> recovery

By implementing the OCEAN+2 Strategy, we will achieve these goals one by one and continue to grow as a company that can contribute to a connected society.

# 10-year Long-term Business Plan “OCEAN+2 Strategy”

On the occasion of the 60th anniversary of our founding on November 3, 2019, we formulated our first 10-year Long-term Business Plan “OCEAN+2 Strategy” and launched it in April 2020. Breaking away from a red ocean full of excessive competition, we will explore a new market, namely, a blue ocean, based on the development of products with excellent competitive advantages while striving to achieve a stable, highly profitable corporate structure and working to solve social issues.

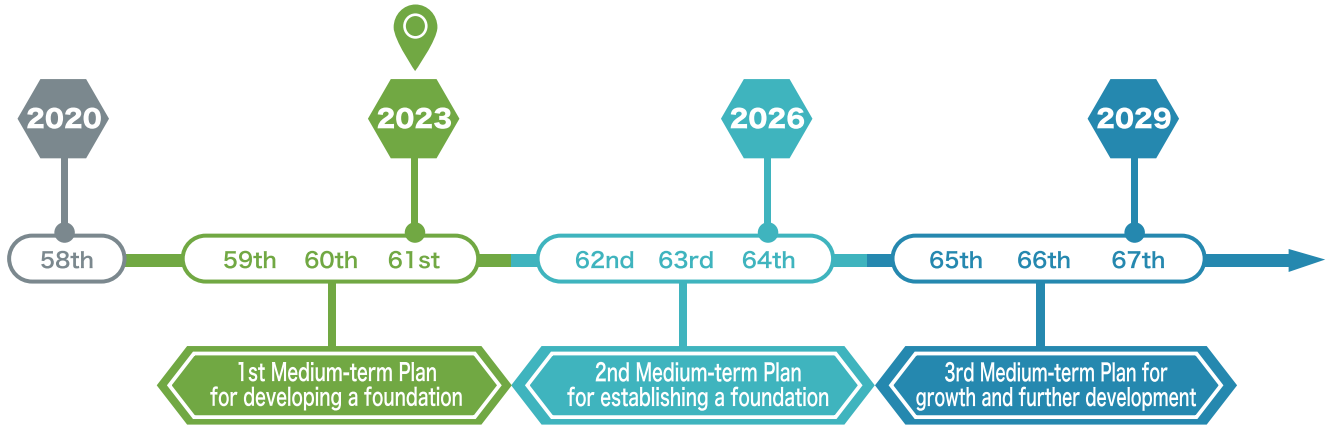


- One** ————— Supply by one company for built-in ICs and other products centered on key products, Arkh series
- Cost** ————— Challenge to lower cost area thanks to the Arkh series, which reduces direct material costs
- Element** ————— Unparalleled competitive edge through size increase of synthetic quartz crystals and crystal wafers, our core technology, cutting and polishing technology
- Alliance** ————— Alliance through open innovation and collaboration to accelerate value creation
- Niche** ————— Creation of stable advantage of being a survivor in a niche market
- +1** ————— Challenges for various crystals based on our growth technology cultivated thus far
- +2** ————— Development of devices that create new value together with new underlying technology

These basic strategies are also connected to our “value creation story,” which will be introduced later, and serve as guiding principles toward the vision that we should strive for.



This 10-year Long-term Business Plan is divided into three phases: the 1st Medium-term Plan for developing a foundation, the 2nd Medium-term Plan for establishing a foundation, and the 3rd Medium-term Plan for growth and further development. For each plan, milestones have been set. We plan to create new value and profits under the OCEAN+2 Strategy while securing stable profits through conventional product development. Currently, we are in the final year of the 1st Medium-term Plan. Although the situation has changed significantly since the start of the 1st Medium-term Plan and we have had to change course, we are steadily preparing for the second plan and aim to complete the first plan, which we consider the stage for developing a foundation.





Japanese characters meaning "Imagination and Creation" engraved on a marble plaque at Central Laboratory

## Value Creation Story from a Growth Perspective

### Balancing stable supply and environmental initiatives

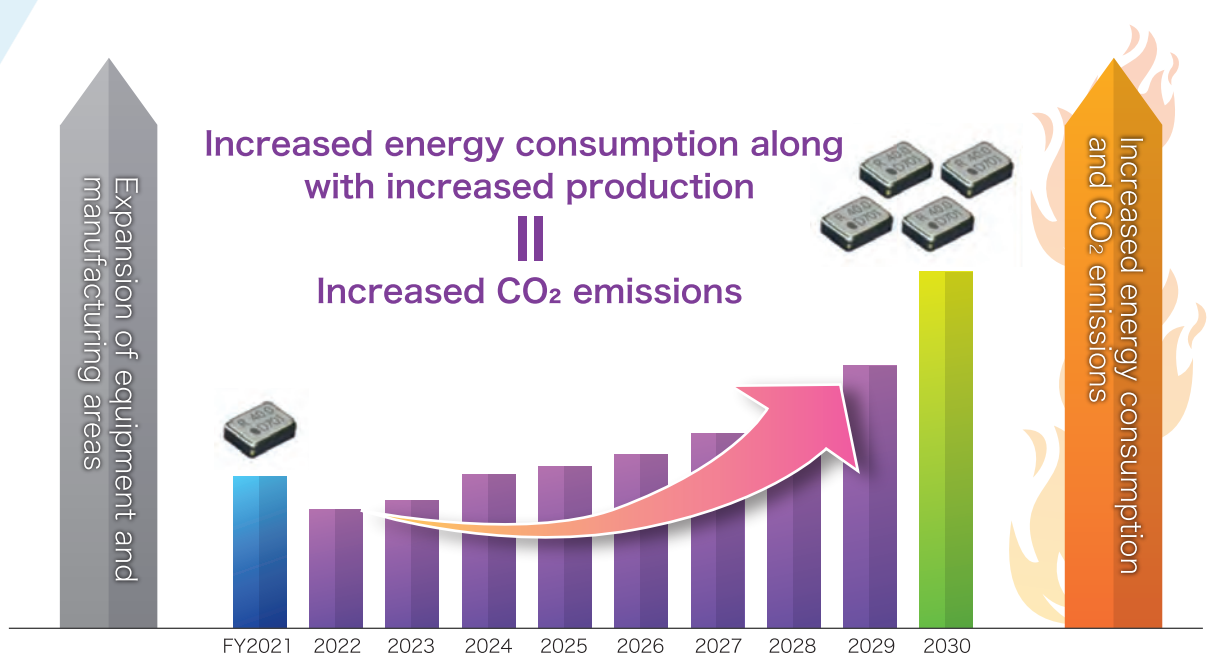
There is no doubt about the expansion of the timing device market centered on the automobile market for automatic driving and the IoT market where wireless communication is essential. In addition, increased data traffic due to technological evolution requires higher frequency timing devices. Our important mission is to stably provide timing devices, which play an important role in a connected society in the future, in the required quantity when necessary.

We cannot possibly cater for such an increase in demand without capital investment. However, if current equipment is expanded to meet the ever-increasing demand, the equipment's installation area and power consumption will increase along with the increase in production volume, resulting in a simple increase in CO<sub>2</sub> emissions. We will increase our production volume and at the same time reduce CO<sub>2</sub> emissions associated with the increase in volume. We also will promote additional initiatives for CO<sub>2</sub> capture, aiming for further growth as a sustainable company by combining "stable supply" and "environmental initiatives" based on the spirit of "Imagination and Creation." We believe that the Arkh series, our original key product, is an ideal product that can solve these issues.

Now, let us introduce our main initiatives for "stable supply" and "environmental initiatives," which we consider material issues.







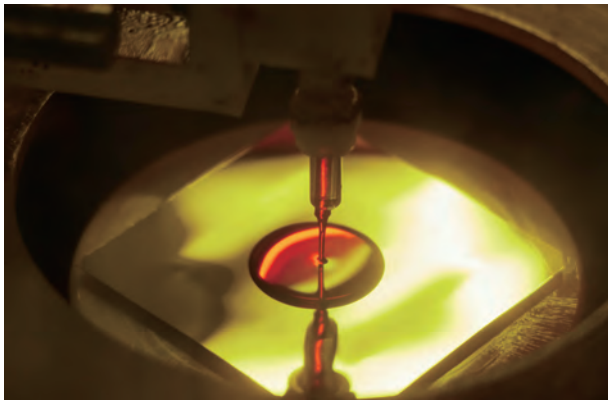
# Value Creation Story from a Growth Perspective

## Value Creation through Core Technologies —Source of Corporate Competitiveness—

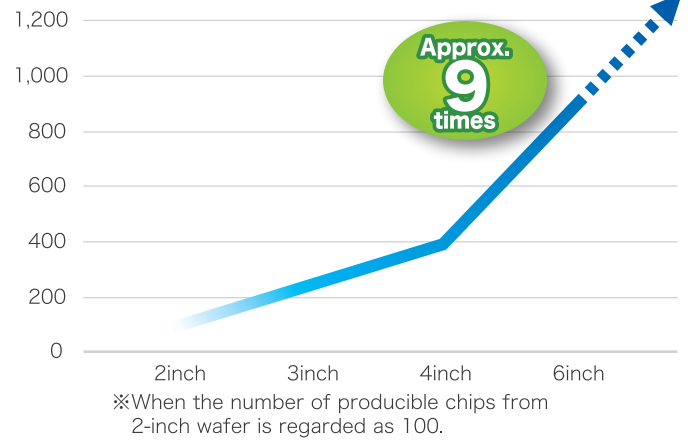
< Improvement in cost competitiveness and advancement of environmental initiatives by increasing the size of crystal wafers >



With the development of electronics technology, quartz crystal devices are required to have value, such as small size, high frequency, and high accuracy. In the processing of quartz crystal elements, it is difficult to meet these requirements with conventional machining. Therefore, photolithography (technology to which the mechanism of photographic development is applied) is becoming increasingly popular. This technology, which is also used in the manufacture of semiconductors, is suitable for microfabrication. Photolithography requires a crystal to be processed into a wafer shape. Accordingly, the larger the size of the wafer used, the more quartz crystal elements can be obtained per wafer, resulting in increased productivity.

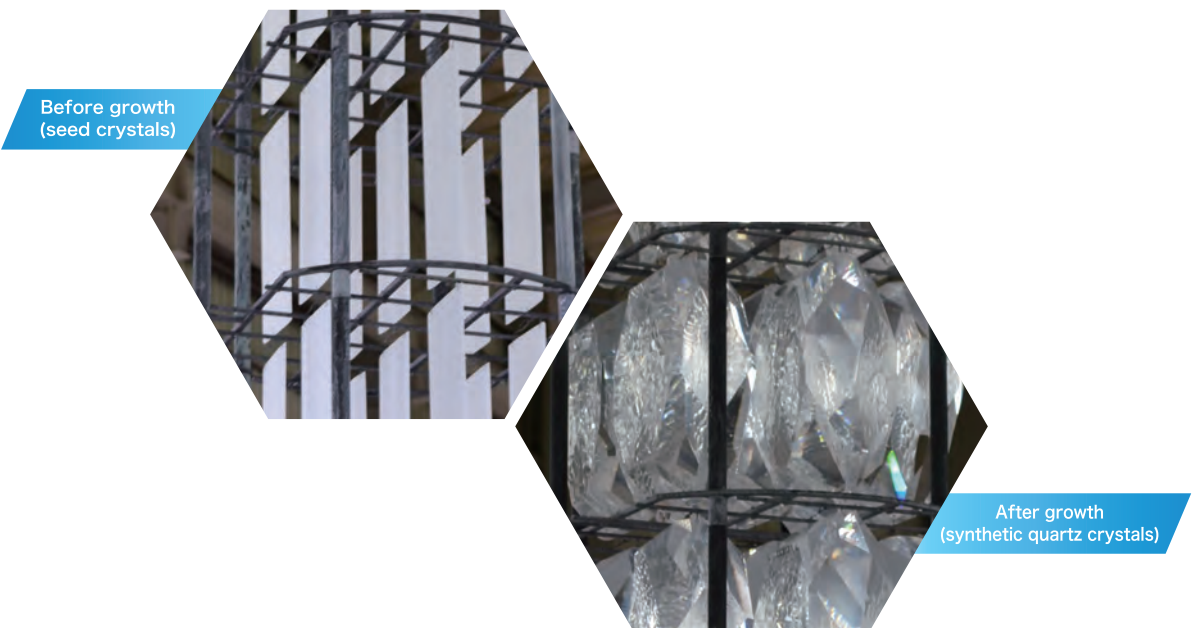


### Correlation between wafer size and the number of crystal blanks



Thus, to secure a competitive advantage in photolithography-type products, we have been working on increasing the size of synthetic quartz crystals and crystal wafers, which serve as core technology, for a decade.

A synthetic quartz crystal is grown by recrystallizing natural quartz melted under high temperature and high pressure conditions on a plate-shaped seed crystal. The growth speed of a crystal varies depending on the direction. Therefore, taking a longer time does not mean growing a larger synthetic quartz crystal. The first thing to do is to develop a seed crystal of the desired size. Formerly, 3-inch wafers were in the mainstream. Now, however, we have already shifted to mass production of 4-inch wafers. In the fiscal year ended March 2022, we expanded the floor space of the Tokushima Production Division to add a clean room for the photolithography process designed for the production of 4-inch wafers. The newly introduced equipment has specifications applicable also to the production of 6-inch wafers in the future.



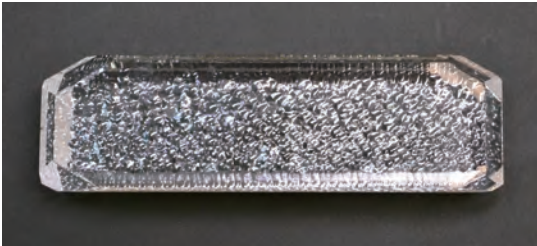


We have already completed the development of synthetic quartz crystals for 6-inch wafers, and in June 2022 we increased the initial mass production lots. We also started developing seed crystals for 8-inch wafers several years ago and are steadily making progress. Although technical and time barriers make it difficult to increase the sizes of synthetic quartz crystals and crystal wafers, advancing this initiative is very important as it is core technology to secure a competitive advantage in the future.

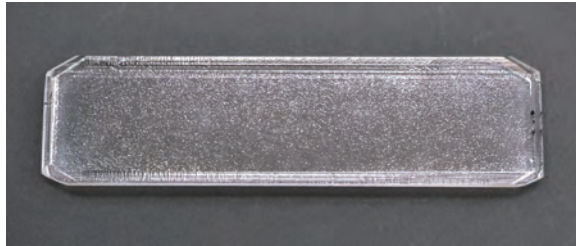
The higher the purity of quartz crystal, the more stable performance is expected to be provided. High-purity synthetic quartz crystals are required in unique environments such as space because defects and impurities will not maintain their features. We optimize the growth conditions, grow high-purity synthetic quartz crystals, and develop devices manufactured only with high-purity synthetic quartz crystals.



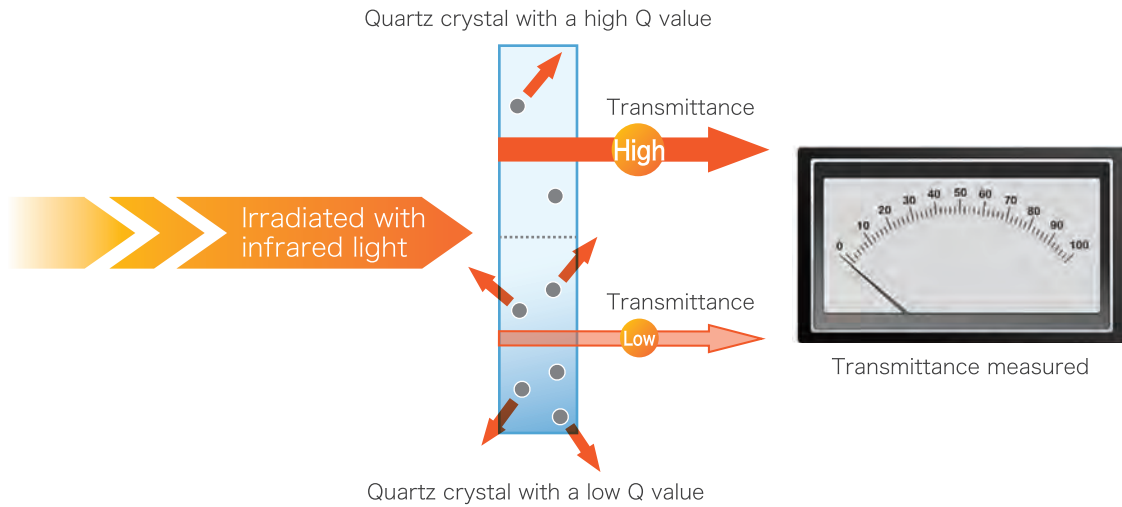
Synthetic quartz crystals with a standard Q value



Synthetic quartz crystals with an ultra-high Q value



\* The Q value is a parameter that indicates the purity of quartz crystals. The higher the Q value, the higher the purity.



 **Point**

We succeeded for the first time in the world in the mass production of the world's most giant synthetic quartz crystal, the 6-inch wafer synthetic quartz crystal. We will enhance our cost competitiveness by increasing the size of crystal wafers to gain a competitive advantage in both technology and cost, especially against the rise of our competitors in Asia.





## Value Creation Story from a Growth Perspective



### Value Creation through Key Products —DAISHINKU's Original Products—

#### < Optimum devices for “stable supply” and “environmental initiatives” >

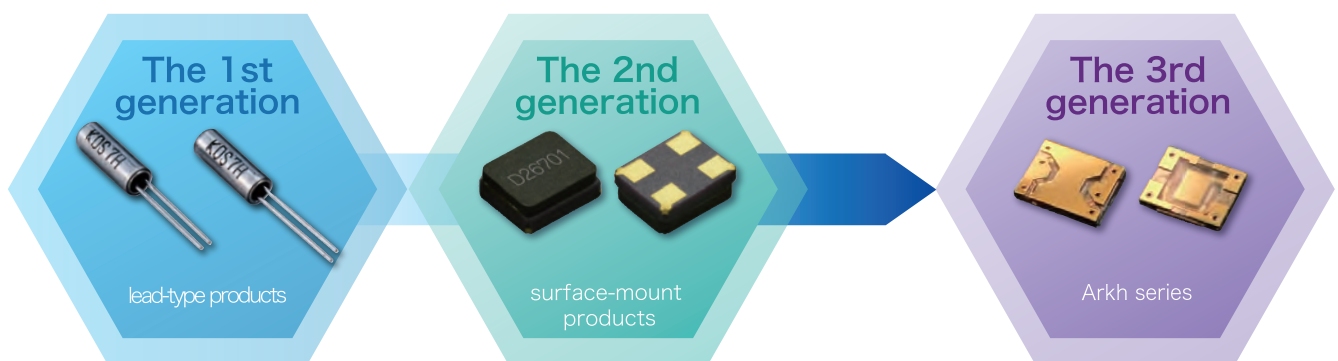
For electronic components of a device, which consist of a small number of parts, the product design and production method play an important role in reducing CO<sub>2</sub> emissions and advancing other environmental initiatives. To realize our ideal, the following requirements need to be met.

- To make products smaller/lighter
- To increase the output per unit area
- To enable fully automatic production
- To reduce the external procurement ratio
- To embed products in other parts used by customers

It is our original Arkh series products that meet these requirements, serving as key products that can both ensure a “stable supply” and “environmental initiatives.”

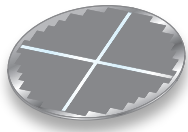
#### < About Arkh series >

We define the first generation of crystal devices as lead-type products and the second generation as surface-mount products using ceramic packaging, which are currently in the mainstream. The products newly developed as the third generation are those of the Arkh Series, based on the Arkh.3G, which has a completely novel structure.



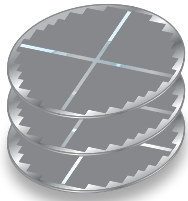
Unlike a conventional structure in which a quartz crystal element is held in a ceramic package using a conductive adhesive, the Arkh.3G adopts wafer-level packaging (WLP) technology that allows three crystal wafers to be bonded together. In WLP, the process from wafer cleaning to bonding is carried out in a vacuum without exposure to the air, enabling the prevention of contamination by foreign substances and reduction of quality risks to the greatest extent possible. Another feature of the Arkh.3G is that it is half the thickness of conventional products, serving as our overwhelmingly superior original product, especially in terms of demand for thin products. Using these technologies developed for the production of the Arkh Series, we will work to create new value.

**Ark series**  
WLP technology

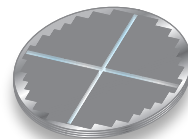


**Processing of one crystal wafer**

Photolithography is applied to a crystal wafer to form outlines and electrodes.



**Hermetic sealing**



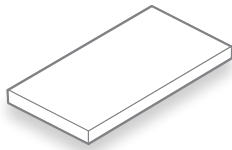
**After hermetic sealing**

After adjusting for periodicity in a vacuum atmosphere, three crystal wafers are bonded, sealed and diced.



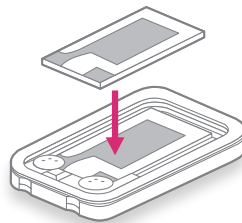
**After dicing**

**Conventional products**  
1 by 1



**Processing one crystal blank**

The synthetic quartz crystal is cut at an angle suited to a specific purpose or application. It is then polished to obtain a desired frequency.



**Bonding the crystal blank**

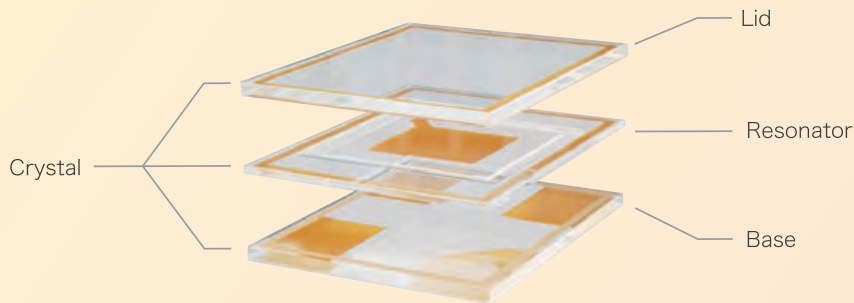
The crystal blank with electrodes is fixed in a package of ceramic or other similar material with a conductive adhesive, whose humidity and time of application are strictly controlled.



**Sealing**

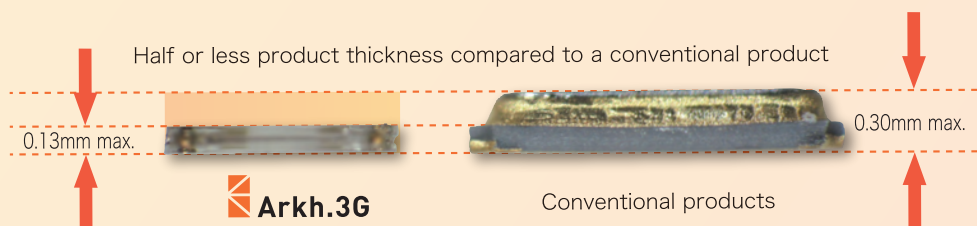
**Ark.3G**

**Structure of Arkh.3G**



\* Arkh.3G have received the 2019 Good Design Award.

**Cross-sectional comparison between the Arkh series and conventional products**

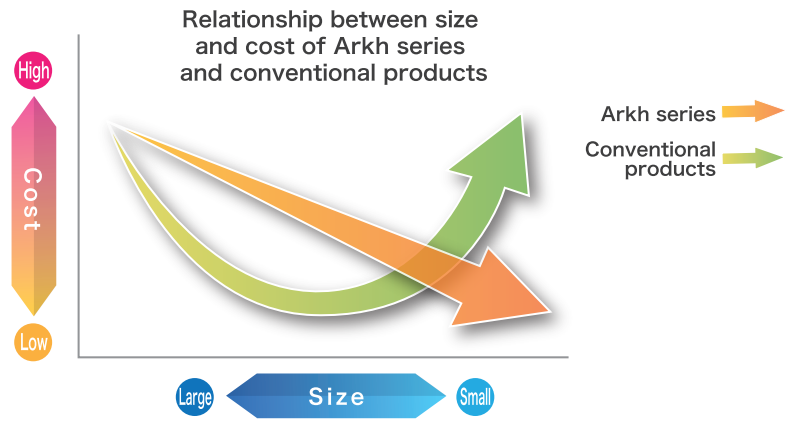
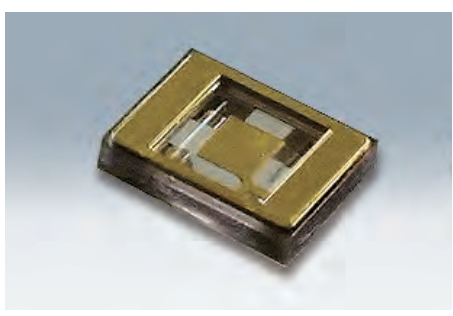


# Value Creation Story from a Growth Perspective

## (1) Small/lightweight/low cost —new original devices—



The smaller the product size, the fewer parts are used, reducing costs. However, when the product is smaller than a specific size, the technical handling difficulties increase, leading to cost increases. However, the world's most miniature Arkh series uses wafer-level packaging technology to stack crystal wafers on top of each other, allowing it to take advantage of our core technology of larger crystal wafers, resulting in smaller product sizes at lower cost. This way, we will combine our original efforts to strengthen corporate competitiveness.

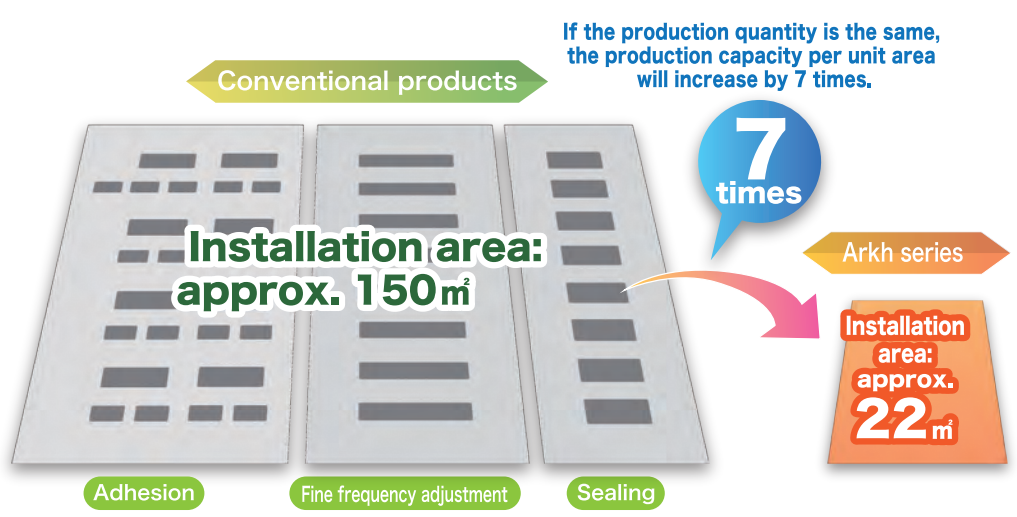


## (2) Challenge of achieving a seven-time increase in output per unit area — to reduce CO<sub>2</sub> emissions and increase in productivity —



We believe that the adoption of WLP technology in the production of the Arkh series will allow us to take full advantage of the size increase of crystal wafers, which we are currently working on. As the assembly of conventional products requires quartz crystal elements to be mounted one by one on ceramic packaging, the production capacity depends on the assembly equipment. WLP technology, on the other hand, enables assembly in wafer form. Therefore, the number of crystal devices that can be produced in one assembly is proportional to the wafer size. In other words, using larger crystal wafers can increase the output per unit area.

Meanwhile, unlike conventional products, the Arkh series products do not need to be transferred one by one for each process, whereby the equipment installation area can be significantly reduced. By reducing the equipment installation area and using WLP technology, we will increase the production capacity per unit area to seven times the current level. While ensuring a stable supply without adding more plants or equipment, we are taking on the challenge of reducing CO<sub>2</sub> emissions."





### (3) Fully automatic production —original production lines—



The design concept of the Arkh series, represented by WLP technology, makes it possible to build new production lines. The Arkh.3G can be assembled in a vacuum atmosphere without human contact from the time the crystal wafer is placed until the product is completed. We are taking on the challenge of fully automatic production by further evolving this production line.



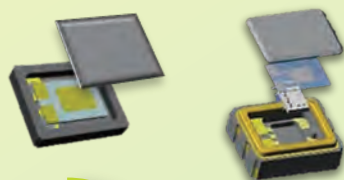
Automatic transfer robot

### (4) Reduction of external procurement ratio —Stable supply—



Using crystals, which can be procured in-house, for the packaging, the Arkh series does not require packaging materials to be procured externally. Therefore, stable procurement can be ensured without being affected by supply chain disruptions due to, for example, the COVID-19 pandemic. We are taking on the challenge of ensuring a stable supply also in terms of the business continuity plan (BCP).

#### Conventional products

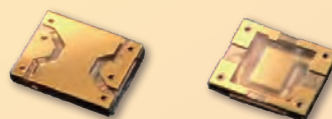


External procurement ratio  
approx.  
**70%**

- Lid
- Base
- IC
- Thermistor etc.

Securing materials in response to increasing demand poses a challenge

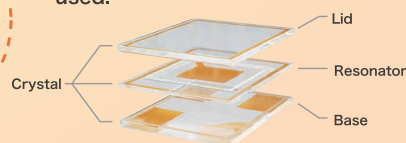
#### Arkh.3G



External procurement ratio

**0%**

- Three-layer structure, the host of which is quartz crystal
- No ceramic packaging, metal cap, or organic conductive adhesive is used.



In-house procurement is possible

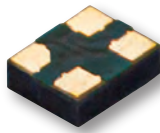
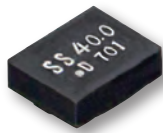
# Value Creation Story from a Growth Perspective

## (5) Trend toward resin molding —ceramic package-less—



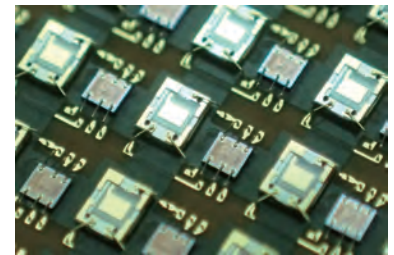
Looking back on the history of packaging, the mainstream for ICs have changed from ceramic packaging to resin mold packaging. For crystal devices, on the other hand, the conversion to resin molding in terms of small products had yet to be achieved until recently because crystal devices require physical space for their mechanical oscillations. However, embedding an Arkh series product instead of a crystal blank has enabled resin molding, solving the packaging issue. Ceramic packaging is also used as a packaging material for various sensors. Therefore, there are concerns about supply shortages due to increasing demand.

Large ceramic packages, in particular, hinder stable supply because they decrease the number of packages obtained from one sheet. With our proprietary technology that allows us to use mold packaging instead of ceramic packaging, we are taking on the challenge of ensuring a stable supply of products of various sizes requested by our customers.



Arkh series product embedded in our in-house mold oscillator

Pursuing environmental friendliness and short delivery times



### What's Arkh?



#### Origin of the brand name "Arkh"

The name is from the Greek word **"arkhitekton,"** namely, the etymology (origin) of the English word "architecture," which connotes the meaning of "structure."

The brand name represents our desire to emphasize that the brand is the "origin" of crystal devices with a completely new "structure."



#### Arkh logo

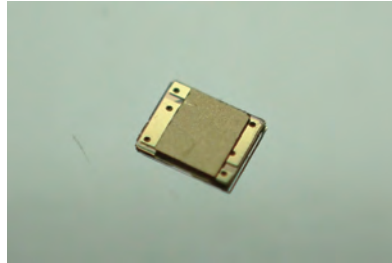
The character "Arkh" is created using the diagonals of hexagons. These characters are overlapped to express the "overlapping of crystals." A crystal is also symbolized at the left end of the logo to express the spread from the crystal.



**(6) Thin thermistors —new structural devices—**



We are developing crystal resonators with thermistors as a line-up for the Arkh series. An efficient assembly is possible if the thermistor can be placed as one layer of the Arkh.3G. In addition, if the thermistor can be made thinner, the thermistor can be placed in any layer of the Arkh series without adding a new layer.



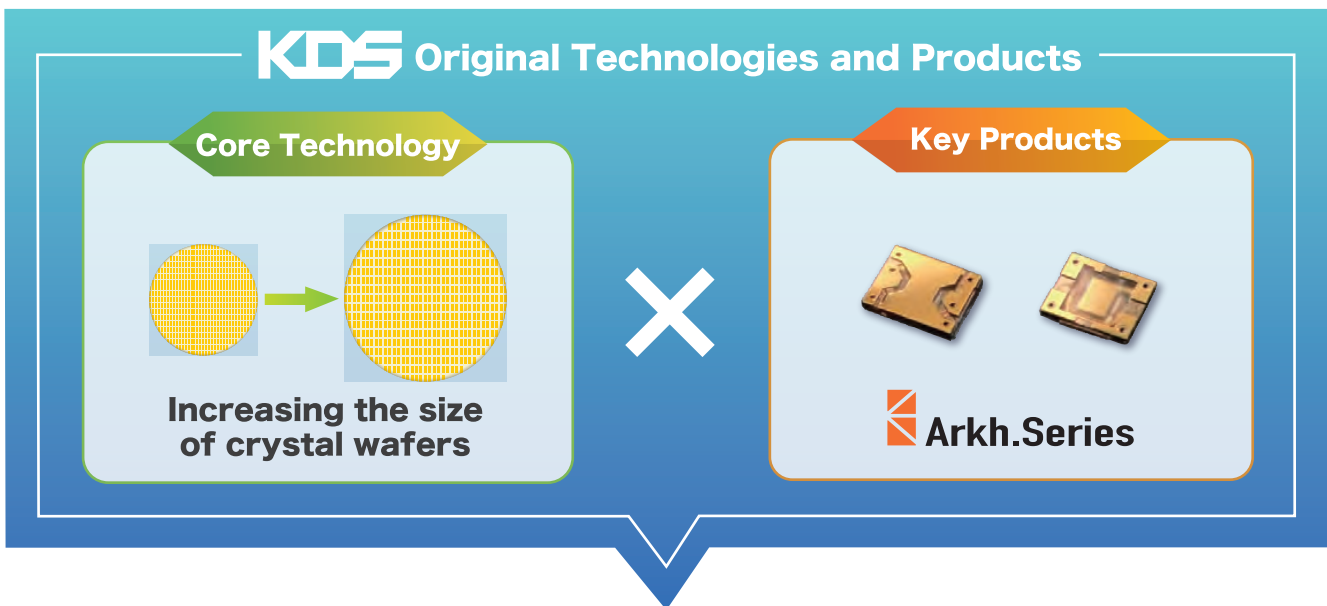
Arkh series equipped with thin thermistors



Thus, the Arkh series is an ideal device that enables “stable supply” and “environmental initiatives.”



With our original core technology “Increasing the size of crystal wafers” and our key product “Arkh Series,” we aim to be a game changer in the crystal device industry and create corporate value.





# Value Creation Story from a Growth Perspective

## Evolution of Production Lines for Conventional Products —to reduce CO<sub>2</sub> emissions and increase in productivity—

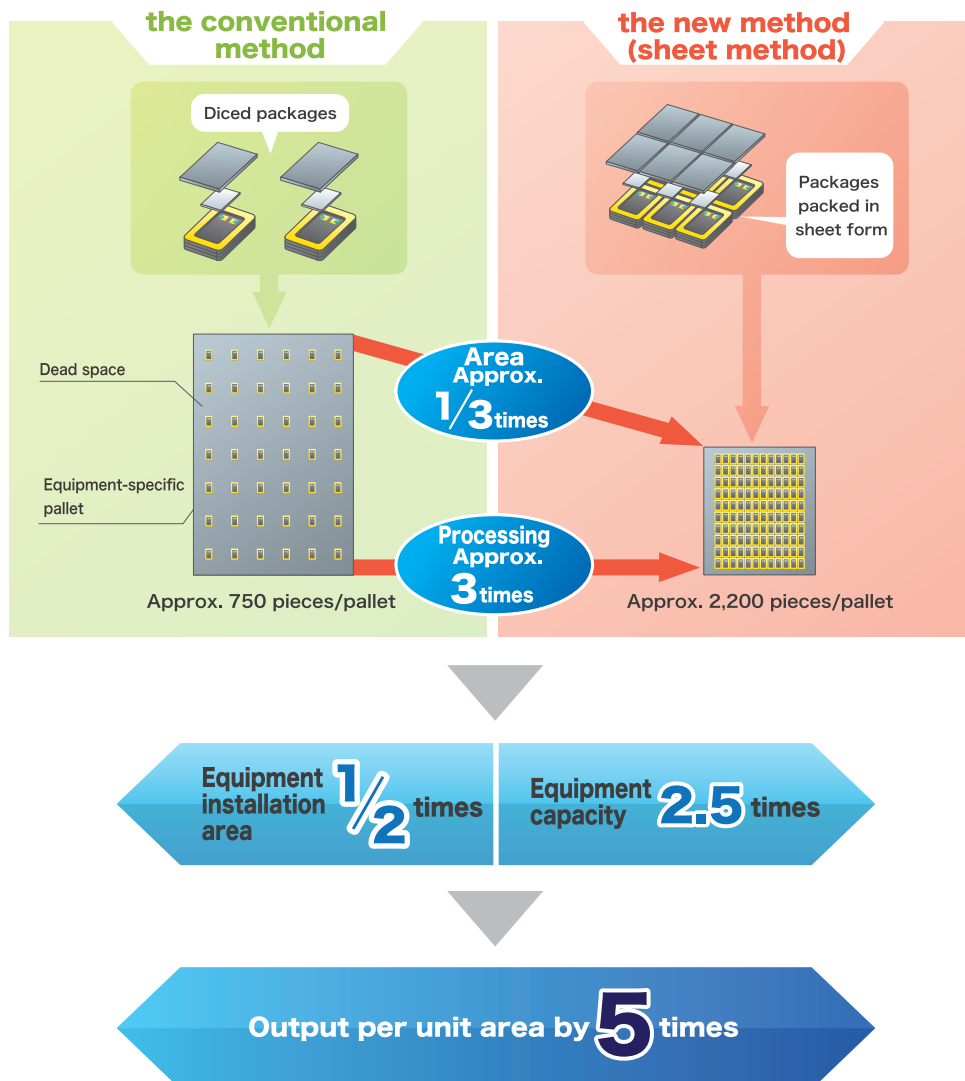
### < Building flexible production lines >



Currently, our production lines have different equipment for each model, making it difficult to change models and production bases. On our existing production lines, products are loaded onto different equipment one by one for each process, requiring complicated product transfer. Therefore, the production lines tend to be enlarged. In addition, the sizes of containers (pallets) used to transport products vary by model, which increases the number of dedicated equipment. Also, an increase in the number of product models leads to an increase in the number of production equipment.

To resolve this issue, we are working on developing equipment that can carry out assembly without requiring process-by-process product loading by using packages in sheet form through the application of the technologies cultivated in the production of the Arkh series. The development of such equipment will reduce dead space and the number of pieces of transport equipment required. In addition, we are working on building a production line that can process a large number of pieces at the same time. By advancing these initiatives, we are taking on the challenge of increasing the output per unit area by five times while aiming to halve the equipment installation area and to increase the equipment capacity by 2.5 times. We believe that building a flexible production line that can produce products regardless of product model is effective also in terms of the business continuity plan (BCP) because such a production line can help avoid geopolitical risks. If the current production line is changed to a flexible one, the amount of CO<sub>2</sub> emissions per assembled product can be reduced by approximately 40%.

### Comparison image of the conventional method and the new method (sheet method)



## Reduction in the Number of Days Required to Grow Synthetic Quartz Crystals and Improvement in the Energy Efficiency of the Growing Furnace —to reduce CO<sub>2</sub> emissions and increase in productivity—



Synthetic quartz crystals are grown in a growing furnace called an “autoclave” under high temperature and high pressure conditions over a long period of time. In growing synthetic crystals, electricity charges account for more than 70% of the cost. Therefore, reducing power consumption will lead to the reduction of CO<sub>2</sub> emissions. As an initiative to reduce power consumption, we have improved the energy efficiency of the growing furnace itself. By reinforcing and repairing thermal insulation materials, we succeeded in reducing daily power consumption by about 20% when compared to the consumption before taking measures.

In addition, through our efforts to shorten the number of days required for growing crystals by reviewing the growing conditions, we have reduced power consumption by 30% or more per growing. As a result, the energy consumed to grow synthetic quartz crystals has been approximately halved and the production capacity of the same equipment has increased by 1.5 times.

**Electricity charges account for about 70% of the cost of growing synthetic quartz crystals**



**Saving energy by about 20% by improving the crystal-growth furnace (reinforcing heat insulating material, etc.)**



**Saving energy by about 30% by reducing the growing period from 150 days to 100 days**



**Total energy consumption reduced by about 50%**  
**Production capacity (growth furnace): 1.5 times**

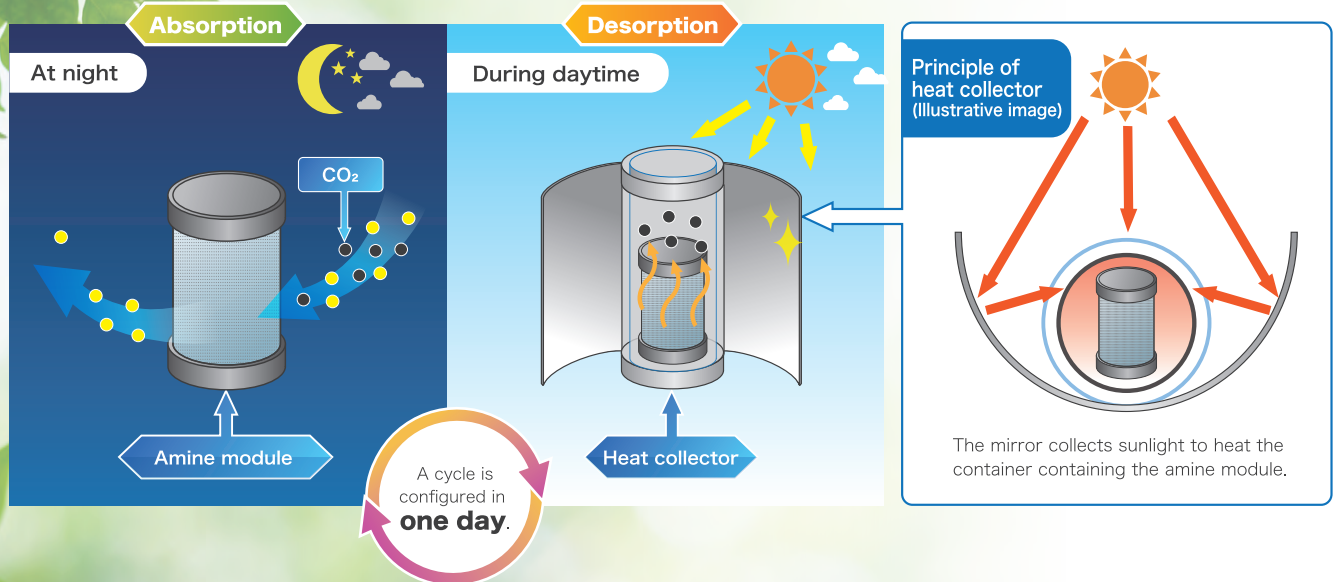
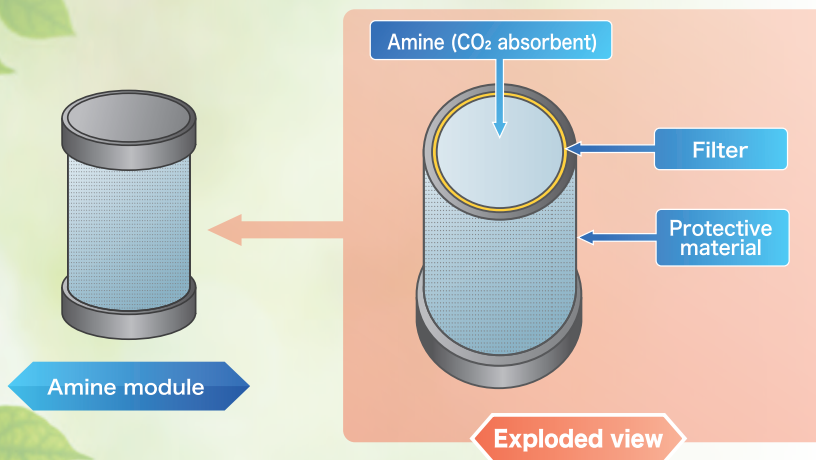
# Value Creation Story from a Growth Perspective

## Initiatives toward carbon neutrality —tackling new initiatives—

### < Tackling the challenge of CO<sub>2</sub> capture >



In addition to reducing CO<sub>2</sub> emissions, we are also taking on the challenge of developing small CO<sub>2</sub> capture modules, or "amine modules," which use the CO<sub>2</sub> absorbing material "amine" as an approach to capture CO<sub>2</sub>. The amine module absorbs CO<sub>2</sub> from the atmosphere by simply putting it on the floor, and the absorbed CO<sub>2</sub> can be extracted by heating the amine module at altitude. In general, heating to high temperatures consumes electricity, leading to the problem of CO<sub>2</sub> generation from power plants. For this reason, we are aiming to extract CO<sub>2</sub> from amine modules by solar heat collection, which does not use electricity or fuel.



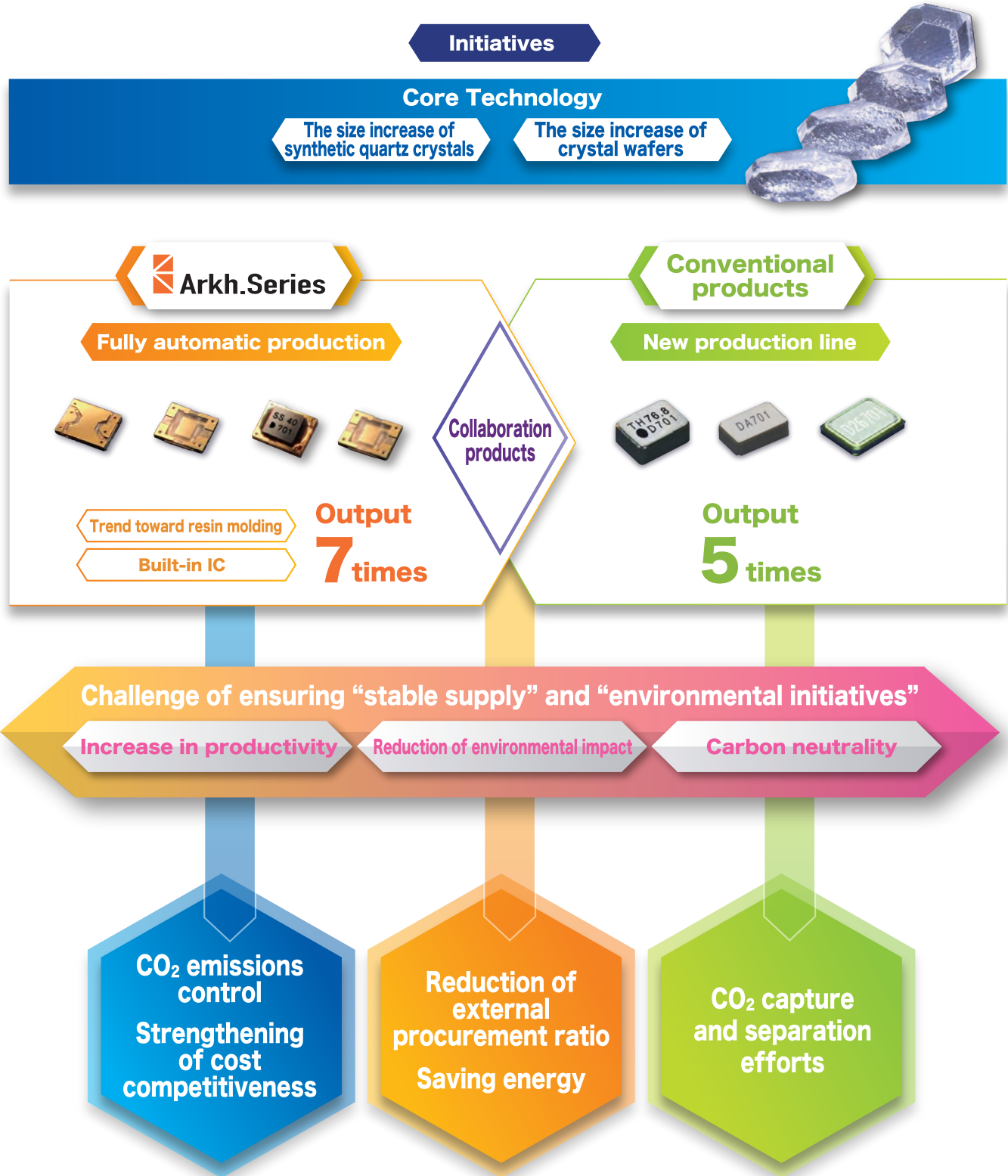
We have set forth the "Scope 1+2\*" Carbon Neutrality Challenge in 2030 as our environmental policy. As one of our initiatives to achieve this goal, we will continue to explore the effective use of amine modules.

\* Scope 1: Direct emissions from fuel use and industrial processes of the company

\* Scope 2: Indirect emissions from the use of heat and electricity purchased by the company



# The Value Creation Story of DAISHINKU





## Human Capital Strategy

Since our foundation, we have always aimed to be “trusted people” under the slogan of “Trust.” While our goal will never change, it is quite important that we disseminate our corporate philosophy of “We will answer society’s call with trust” together with our purpose throughout the company. We believe that it is essential to make every effort to get all employees to wholeheartedly agree with this corporate philosophy and to say, “Yes, that’s our corporate culture.”

We engage in our business toward the management vision: With “trust” as our slogan and we aim to become a company in which all employees work with hope while nurturing the spirit of valuing “connections between people.” We aim for all employees to work with hope with independence and vigor. For them to do so, we believe the key points are “helping them clarify what they want to do,” “aligning what they want to do with the corporate philosophy and purpose in a way that satisfies each of them,” “having them realize that each of their efforts and achievements contribute to the company and society,” and “motivating them to have a desire to keep improving themselves.”



People are not truly motivated by the words of others. People have different personalities, and each has their own strengths. What are your strengths? What do you want to do, and how do you make the most of them in your company? In order to truly motivate employees, we believe it is important to help them find the answers to all these questions and improve their job satisfaction by allowing them to work with pleasure. On the other hand, we also consider it essential to improve work conditions by establishing a system to allow employees to work with peace of mind and by providing a safe and comfortable work environment, as well as to ensure that they work with comfort.

We believe that our human capital can be maximized if each employee aims to become “trusted people” by working with a company where all employees are independent and self-motivated with a focus on the two aspects of “work with pleasure” and “work with comfort.”

However, merely having everyone work in their expertise is, of course, not enough for an organization to accomplish its mission. This is because there are some pieces that cannot be filled by combining the strengths of all employees.

"If no one is good at it, I will do it myself." "I'm not able to do it now, but I want to be able to do it." "I want to train this person to be able to do this." We believe that it is essential to improve the integrity, which is the fairness and seriousness to act for the organization and team, and to create a challenging environment to expand employees' expertise. To make this happen, we need to solve the following three challenges:



## Integrity envisioned by DAISHINKU

People with integrity often refer to those who can comply with laws and regulations and practice ethical behavior. In other words, people with integrity are those who can act correctly even if others do not see them. However, we believe that this alone is insufficient. Our definition of integrity is the combination of "seriousness," which is a commitment to carrying through with members with unwavering belief and devotion, and "sincerity," which is a virtue of helping others with no ulterior motive. To ingrain integrity into the organization, we will promote the following initiatives to build a relationship of trust as "Team DAISHINKU," aiming to become a strong organization with a sense of unity.

- **Conduct integrity education for all employees,**
- **Make them fully aware of the importance of integrity by referring to it at the beginning of various internal training programs, and**
- **Have leaders and managers themselves act as a role model and educate their subordinates to improve their level of integrity**



If what we want to do, what we want to achieve, and what we want to take on as challenges are connected to our corporate philosophy and purpose, everyone's energy will move in the same direction. By implementing various ideas generated by each individual, we can share a sense of unity and a sense of achievement, leading to improve motivation. As a result, we will be a team that grows and moves forward with each other while working hard with trusted colleagues.

In other words, we believe that the positive spiral created by everyone working with pleasure will continue to increase individual growth and team strength and produce more excellent results.

### Personal growth and self-realization

Know your strengths and what you want to do

- Obtain opportunities to demonstrate your ability
- Seek support for further growth and career realization

### Respect diverse personalities

Show respect for the individual and consider how to make the most of each other's potential

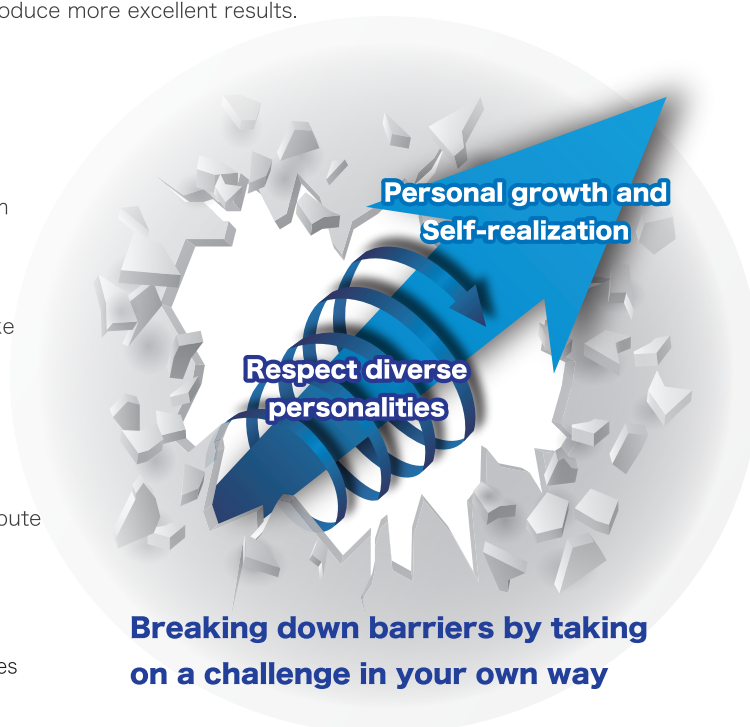
- Developing a mutually trustworthy relationship

### Take on a challenge in your own way

Have self-confidence that you are recognized and contribute to the development of society and the company

- Develop positive thinking that drives you to take on a new challenge

This way, we aim to create a corporate culture that encourages mutual trust and challenges while valuing communication.





# Human Capital Strategy

## Initiatives to work with pleasure

### Course Change System

We believe providing a place for self-realization to work with pleasure is essential. The course change system enables employees to take on tasks beyond the conventional course's role, expanding the degree of freedom in their career development. We will continue to support our employees' career development to support their self-realization.



#### < Promoting career development through the flexible internal career-tracking system >

- Limited job scope and work location track** Employees on this track are assigned to a specific job scope and work location and are responsible for routine tasks assigned under the employment contract.
- Local employment track** Employees on this track are assigned to relatively a small job scope, for which no relocation is required, and engaged mainly in supportive or routine tasks.
- Main career track** Employees on this track have no limitation for their job scope and are responsible mainly for non-routine tasks that requires creativity and ingenuity. Accordingly, they may experience a job transfer that may relocation, including relocation to an overseas country.

#### < Track change results >

##### Local employment track >>> Main career track

	FY2019	FY2020	FY2021	FY2022
Male	1	0	1	1
Female	1	2	2	2
Total	2	2	3	3

##### Limited work >>> Non-management position

	FY2019	FY2020	FY2021	FY2022
Male	11	8	16	13
Female	0	6	6	2
Total	11	14	22	15

### In-house Internship Program

This program helps employees gain awareness for themselves and their related departments by experiencing the work of other departments for a certain period. This program allows employees to understand the meaning of their work and the relationship with other departments to link them to cooperation among departments and overall optimization. Employees can apply for this program at their request and be recommended by their manager or the HR department.



### Top Executives Listen to Young Employees' Voices

In fiscal 2022, 87 younger employees, most under the age of 35, gave presentations to the president. They expressed their desire to use their strengths to implement and solve tasks and issues that they found through their daily work. Once the president agrees and gives a "go" sign, employees can take the tasks and issues back to their department, implement and solve them with their supervisors and other team members. There is no need for internal coordination or procedures. In a positive way for the Company, employees will have their strengths recognized and be able to do what they want. We believe this program will motivate team members, create a win-win situation for the Company and its employees, and foster a culture of taking on new "challenges".



### Strengthening New Employees Training

As the working population declines, early training and retention of new employees is essential. Accordingly, we have extended the support from the HR department (follow-up training, interviews, etc.) from one year to four years for new employees hired regularly, mainly university graduates.

We will also promote creating an environment where new employees can work with peace of mind without being isolated, by introducing a mentor system and increasing opportunities to interact with senior employees of similar age.



## Expanding Measures to Strengthen the Team

It is natural that what everyone wants to do and what everyone can do is different. We should work on strengthening the team performance so that the work required by the company matches the work required by employees by properly combining their individuality and maximum performance can be achieved. Working in their area of expertise is rewarding and motivating for employees. We believe this is an ideal situation for the company, where each employee is at their maximum potential, and the organization is at its maximum strength.

In addition, the managers who manage the team aim to maximize team performance by building a work environment where all team members can take on challenges through two-way communication with their subordinates while keeping a clear vision of the mid- to long-term organizational design.



## Talent Portfolio and Database

Optical placement of talents (the right person in the right place) to maximize organizational strength is not easy. However, we are promoting initiatives such as setting up a talent portfolio and building a talent database to achieve this goal.

Clarify what kind of talents are required (what they should be). Clarify what kind of people your employees are. Combining the two allows us to visualize whether talents are appropriately allocated. We will aim for optimal allocation to supplement insufficient personnel and eliminate mismatches, enabling us to hire, train, and allocate employees based on our medium- to long-term plan. To prevent such strategic use of talents from turning out to be a pie in the sky, we will newly establish the Strategic Human Resources Management Department to take the initiative in finding and recruiting human resources and promote it from a new approach.

### Talent portfolio envisioned by DAISHINKU



# Human Capital Strategy

## Work with comfort



It is important to work while feeling a sense of job satisfaction; in other words, to work with pleasure to thrive in working. However, we believe there is another important factor. It means working with comfort. To this end, a safe and comfortable working environment is essential. We are improving the environment by expanding various systems and taking initiatives such as health and safety. We will continue to work to create a safe and comfortable working environment for all employees.

## Initiatives to work with comfort

### Providing work options to make employees thrive



Sudden events, such as injury, illness, childcare, caregiving, and spouse's job transfer, force employees to take a leave of absence or quit their jobs.

To provide options for working in such cases, we have reviewed the systems of staggered working hours, shortened working hours, and teleworking to create systems that are easy to use. We will promote further expansion of such systems so that our employees thrive in a safe and satisfactory environment. These systems allow our employees to use the staggered or shortened working hour system for hospital visits, childcare, and caregiving, or work from home after accompanying their spouses on a job transfer.



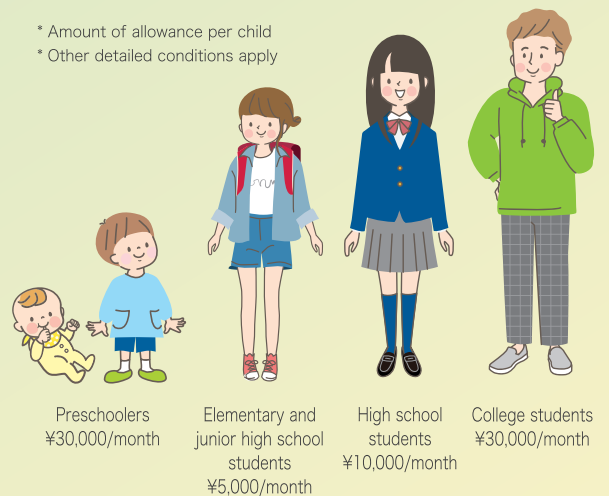
### Financial support according to the life cycle



We pay family allowance to dependents who meet certain conditions. The family allowance itself is not an uncommon system. Still, the unique feature of our system is that the amount of the

allowance varies depending on the age and educational background of the children. The system is designed to allow families to work peacefully by changing the amount according to when financial support is required. Using the system, young employees can raise their children with peace of mind even if their wages are not yet growing, and their children can go on to university with peace of mind.

\* Amount of allowance per child  
\* Other detailed conditions apply



In addition to childcare, for dependents who meet certain conditions and require nursing care, we provide caregiver allowances depending on the level of nursing care needed. For example, the system is designed to allow our employees to work comfortably even when their parents are at an advanced age.



## Expanding fields where employees can play an active role even after retirement by utilizing their experience and knowledge

We have added a category of senior experts to the existing post-retirement employment system and have created a field where people with rare knowledge and skills as position holders and specialists can play an active role by utilizing their experience and knowledge.

In addition to the roles as employees after retirement, such as mentoring younger employees, they can work side by side with younger members by utilizing their experience and knowledge, free from the conventional way, rather than thinking that older people should not be involved. We aim to develop such a work environment and promote further expansion of the system.



## Creating a safe and healthy work environment

Learning from the lessons of recent natural disasters such as earthquakes, heavy rain, and fires at other companies, in fiscal 2022, we reviewed our safety and health activities and strengthened our system. Our focus had been on activities at each base. Still, we have moved to a system where the top management is the most responsible person, and the entire company can actively engage in activities. We are also strengthening the Occupational Safety and Health Office and promoting global horizontal deployment among bases to raise

the level of the entire Group. Specifically, we have implemented measures to prevent shelves from falling over company-wide by installing anti-falling metal fittings on all shelves over 1.5 m high or stacked in two levels and reviewing our disaster prevention manual to enhance effectiveness. We also conduct company-wide evacuation drills with a sense of tension.

In addition, to prevent accidents, we thoroughly conduct risk assessments during equipment installation and layout changes. At the same time, to eliminate potential hazards in daily operations, we started near-miss suggestion activities in which employees immediately improve on near-misses they have encountered. Nevertheless, if accidents unfortunately occur, we thoroughly investigate the true causes and take fundamental measures to prevent recurrence.

At the same time, we also promote activities to raise employees' awareness of safe behavior and hold a monthly safety morning meeting. During Safety Week or in the event of past disasters, the top management directly sends out messages on safety.

Through these activities, we strive to thoroughly implement the 3S (Seiri, Seiton, and Seiso, meaning Organize, Put in Order, and Clean) activities that form the basis of safety and strengthen safety awareness. For example, each department establishes its own 3S rules and conducts self-inspections and mutual patrols by third parties to conduct score evaluation, thereby clarifying each department's strengths (good points) and weaknesses (issues/points to be improved). This system is operated so that all employees participate by horizontally spreading the good points to other departments and bases and improving the weaknesses in their departments. Activating these 3S activities enhances each employee's awareness and leads to safe operations.

We will continue these activities, firmly establish them company-wide, and strive to realize a safe and healthy work environment where anyone can work peacefully.

< Number of industrial accidents >

	FY2019	FY2020	FY2021	FY2022
Number of industrial accidents	6	4	2	2
Absence from work	0	0	0	0

\* There were no accidents involving absence from work or fatal accidents.



< Evacuation drill >



< Measures to prevent shelves from falling over >

# Human Capital Strategy



We have established a system that exceeds legal requirements for the period of childcare and caregiver leave to support a balance between family lives and work. The rate of employees taking childcare leave and returning to work has been high. The return-to-work rate has achieved 100% for consecutive years since 2013. In addition, based on the Act on Childcare Leave/Caregiver Leave revised in October 2022, we have designed a more flexible system regarding the number of splits and the period of childcare leave, as well as the timing of starting the period, so that married couples can cooperate while raising their children. As a result of these initiatives, the number of male employees taking childcare leave has been on the increase as shown in the table below. In addition, we have developed a system that allows employees to use shortened working hours after returning to work until March of the year when their children are in the third grade of elementary school so that they can balance childcare and work.

### < Childcare leave taken >

	FY2019	FY2020	FY2021	FY2022
Male	0	0	1	3
Female	3	4	5	4
Total	3	4	6	7

### < Outline of the childcare leave system exceeding statutory requirements >

Details of the system		Statutory requirements (from October 1, 2022)	Our system (from October 1, 2022)
Eight weeks after birth	Parental leave	Up to a total of four weeks within the first eight weeks after child's birth	Within the first eight weeks after child's birth
	Splitting parental leave	Leave can be split into two leaves	Leave can be split into two leaves (Each leave may exceed four weeks)
	Employment during parental leave	Workers may work during leave to the extent agreed upon, provided that a labor-management agreement has been concluded	Workers may work (provided that a labor-management agreement has been concluded) * Employees will be less worried about work and will be more likely to be absent from work
Under one year old	Childcare leave period	Period of raising a child who is less than one year of age	Leave can be taken during the period when raising a child under one year and six months Leave can be split into three leaves
	Splitting childcare leave	Leave can be split into two leaves	
One year to one year and six months	Childcare leave period	Leave can be taken when conditions are met	* The third leave can be included in the period after the child reaches one year of age





## Promoting Health & Productivity Management

In addition to creating a healthy working environment for our employees, we are also working together with the DAISHINKU Health Insurance Association to implement various initiatives so that their families can live in good health. We provide a wide range of support, including tumor marker tests for cancer at regular health check-ups, support for sports events such as bowling tournaments, and subsidies for

influenza vaccinations and medical screening. Accordingly, we received the Excellent Company Award for Promoting Cancer Control in fiscal 2022.

Going forward, we will continue to promote various initiatives with the aim of becoming a company where employees and their families can live in good health.



## Ensuring diversity in the company, including promoting women's activities

As a global company, we believe we will be a strong company because diverse human resources can play an active role by leveraging their strengths. As part of such measures, we promote the hiring of foreign nationals and mid-career employees, and create a comfortable workplace to promote the active

participation of women.

In particular, by creating a working environment where women can play an active role over a long period of time, we will continue to develop role models for our employees in order to promote them to position holders, managers, and executives and foster executive candidates. As of March 31, 2023, the ratio of women in career positions was 4% (target: 7%) and that of women in management positions was 3% (target: 7%).





General Manager of Finance &  
Accounting Division

## Kuniharu Hayashi



## Financial Capital Strategy

### Achieving the 10-year Long-term Business Plan “OCEAN+2 Strategy” (the “Business Plan”) and balancing “stable supply” and “environmental initiatives.”

We believe aggressive investments in plant and equipment in addition to investments in R&D and human resources is essential to achieving the Business Plan, which started in April 2020, and to balancing “stable supply” and “environmental initiatives” in the face of ever-increasing demand. In fact, we plan to make investments totaling 60.0 billion yen over the next decade. The Finance Division will move forward with financing and investments for growth from various perspectives, primarily through generation of cash flows from operating activities, to achieve the plan.

### Our basic approach to financial strategy

To maximize cash flows generated from business activities and to ensure sustainable investment for growth and stable shareholder return, the Company has placed emphasis on capital efficiency. In the 1st Medium-term Plan released in June 2021, we selected ROIC (return on invested capital) as a management indicator in addition to net sales and operating income. Although we aimed to achieve an ROIC of 6% or more in the fiscal year ending March 31, 2024, the final year of the 1st Medium-term Plan, we find it difficult to achieve the target by the fiscal year as the environment of the markets, such as the telecommunications and consumer equipment markets, have been sluggish. We also aim to achieve an ROE (return on equity) of at least 10%. We have estimated that ROE will come in at close to 10%, given that the Company’s cost of capital tends to move in line with the business cycle peculiar to the industry. By achieving the ROE target of 10% or more, we can secure a positive equity spread (ROE – cost of equity). We therefore believe that our continued achievement of the target will result in PBR of 1x or more.

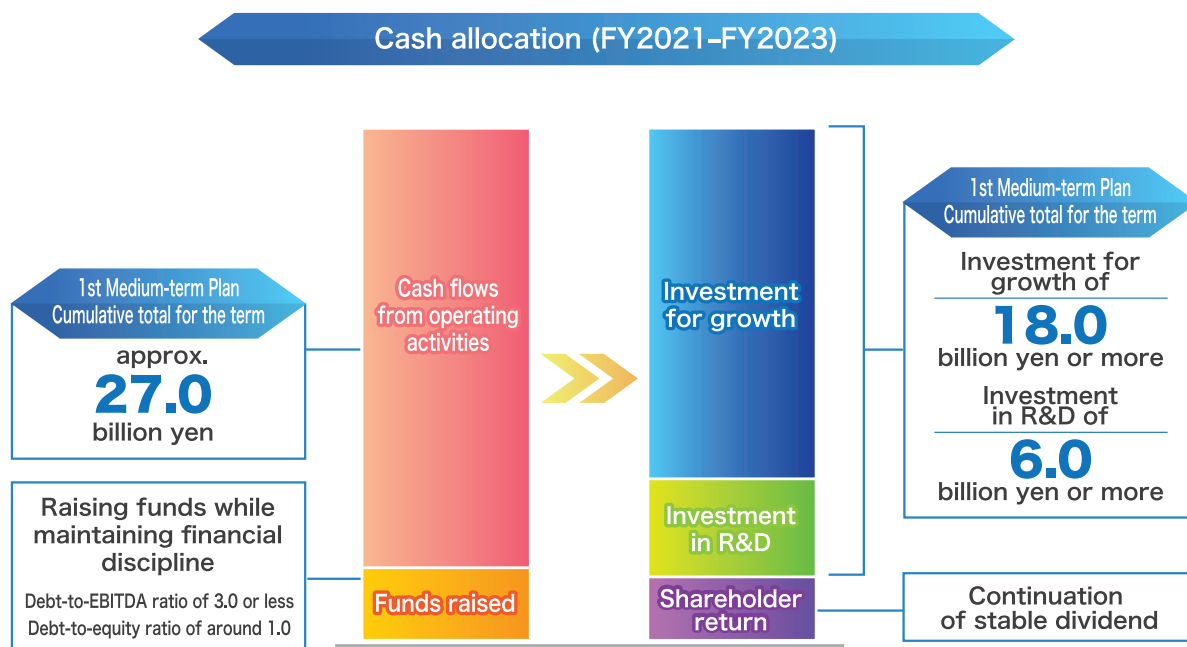
In addition, as a solid financial base is a prerequisite for the sustainable growth and improvement in capital efficiency, we have sought to further strengthen and maintain the solid financial base with a debt-to-EBITDA ratio of 3.0 or less and a debt-to-equity ratio of around 1.0 in mind. We, therefore, will control the amount of borrowings so these ratios fall within the above levels.

In the wake of the supply chain disruption and the trend toward working style reform in recent years, which have come to the fore since after the COVID-19 pandemic, we are increasingly urged to review and revise our business plan. This way, cash flows from operating activities, which are susceptible to unforeseeable business risks, could affect our financial soundness. To address these challenges, we will strive to solidify our financial strength by generating free cash flows through inventory control, improved investment efficiency, etc., and by optimizing our capital structure through the reduction of cross-shareholdings and other measures. We will push forward with efforts to enhance our corporate value, such as strengthening our financial strength, while promoting the growth of our business by improving capital efficiency. Specifically, we will promote our business growth by raising our profitability primarily in accordance with the OCEAN+2 Strategy, and by improving our capital efficiency through the balance sheet-focused management.

## Cash allocation

Over the long term, we are planning to invest 60.0 billion yen for 10 years under the Long-term Business Plan. Over the medium term, we are investing 18.0 billion yen for three years under the 1st Medium-term Plan, of which 9.9 billion yen, more than half the total investment during the term, is the investment related to photolithography, a main driver of our business performance in the future. We will continue to assess potential investments for growth as a top priority, which include investments in photolithography and other next-generation businesses and in R&D. As noted above, we have set ROIC as one of the metrics to assess whether we have generated a return that is commensurate with the capital invested for growth and to use it as a basis for investment and other decision-making. We have set a range of KPIs as components of an ROIC tree, such as operating margin and cash conversion cycle (CCC). We seek to enhance the return on investment by improving operating margin and shortening CCC. We will also work to earn a return exceeding the cost of capital, or in other words, continuously increase the EVA spread, which is the difference of ROIC minus WACC (weighted average cost of capital), to enhance our corporate value.

Further, we are committed to a stable and consistent payment of dividends based on our shareholder return policy and will consider a flexible shareholder return. Moreover, we will consider raising funds through borrowings while maintaining our financial discipline set out in the Basic Approach to Financial Strategy. During the fiscal year ending March 31, 2024, we plan to spend 5.0 billion yen in capital expenditure and 2.3 billion yen in R&D.



## Shareholder return

Recognizing that a stable and consistent payment of dividends is an important part of its management policy, the Company is committed basically to paying dividends twice a year, i.e., interim dividends and year-end dividends. To maintain/improve our corporate competitiveness and maximize our corporate value, we will inject our funds in growth drivers, such as R&D and production facilities, strengthen our management foundation for future business development, and comprehensively assess our business environment as well as financial performance, aiming for stable return of profits commensurate with our financial performance.

# Environmental Initiatives

The Group has published the DAISHINKU Group Environmental Policy as a basic policy for environmental initiatives, underlining our belief in achieving both profit generation and environmental conservation concurrently. In March 2023, we reviewed our environmental policy and declared the “Scope 1+2” Carbon Neutrality Challenge in 2030 as a new initiative. This initiative reflects our commitment to achieving a sustainable society for future generations, in collaboration with all stakeholders, and to becoming a corporation trusted by the entire society.

URL: <https://www.kds.info/company/environment/>



You can access the DAISHINKU Group Environmental Policy by scanning here.

## Carbon neutrality initiatives

### “Scope 1+2” Carbon Neutrality Challenge in 2030

Both Scope 1 and Scope 2 represent greenhouse gas (GHG) emissions generated by corporate activities. In our case, Scope 1 refers primarily to direct emissions from fuel combustion, whereas Scope 2 mainly represents indirect emissions from electricity consumption. The Company strives to achieve carbon neutrality for Scope 1 and Scope 2 GHG emissions by 2030. To achieve this goal, we consider it essential to (i) Develop products with low environmental impact, (ii) Reevaluate our manufacturing process, (iii) Introduce renewable energy, (iv) Adopt advanced facilities with less environmental impact, and (v) Enhance other energy conservation activities. The following major initiatives are currently in progress.

<b>i</b> Develop products with low environmental impact	Development of our original Arkh series products, Development of compact CO <sub>2</sub> capture modules
<b>ii</b> Reevaluate our manufacturing process	Increasing the size of crystal wafers, building of flexible production lines, and reduction in the number of days required to grow crystals
<b>iii</b> Introduce renewable energy	Procurement of environmental value-added electricity and installation of solar panels
<b>iv</b> Adopt advanced facilities with less environmental impact	Installation of industrial heat pumps
<b>v</b> Enhance other energy conservation activities	Implementation of energy-saving measures for the growing furnace and optimization of the air-conditioning equipment operation

### iii Introduce renewable energy: installation of solar panels

To achieve carbon neutrality, it is essential to expand the use of renewable energy. Renewable energy, derived from solar power, wind power, and geothermal energy, is considered an important energy source that places no burden on the global environment as it is non-depletable and emits minimal greenhouse gases.

There are two methods for introducing renewable energy into a plant or other facilities: external procurement and in-house power generation. External procurement involves the purchase of renewable energy from external sources, whereas in-house power generation entails the installation of solar panels and other equipment, specifically to consume the power they generate on-site. Both methods need promotion, with in-house power generation through solar panels being of particular importance. When electricity is sourced externally, it incurs losses as it passes through electrical wires, known as power transmission loss. The more remote the location is, the larger the power transmission loss. With in-house power generation, the loss is close to zero, leading to energy conservation and reduction of environmental impact.

We will install solar panels in stages by 2030 to increase the usage ratio as much as possible.



## iv Adopt advanced facilities with less environmental impact: installation of industrial heat pumps

A heat pump employs technology that uses electricity to transfer thermal energy from air or water to produce cold or heat. As thermal energy is transferred from outside, it offers high energy-saving performance and is expected to reduce CO<sub>2</sub> emissions. Heat pumps have conventionally been used for cooling appliances such as refrigerators and indoor cooling systems. However, recent technological innovations have made heating applications (hot-water supply and steam) feasible for practical use, leading to the increasing utilization of heat pumps in the manufacturing industry as an alternative to industrial boilers.

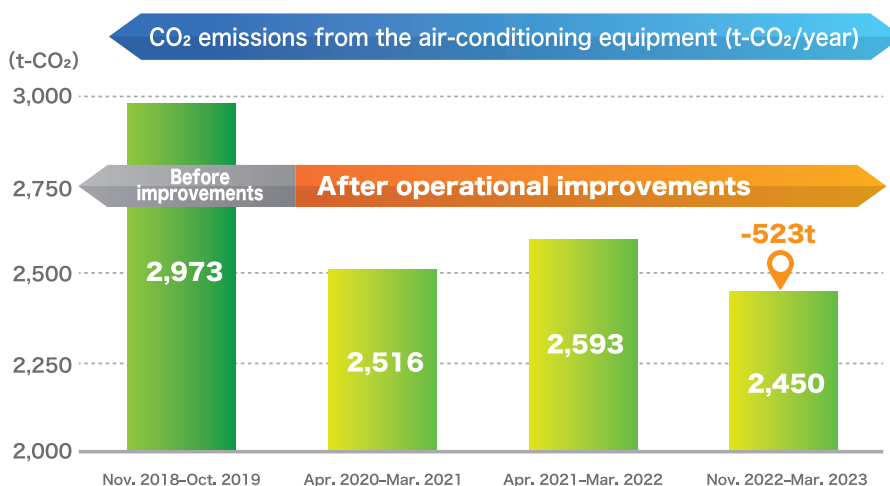
The Company is proactively leveraging new innovations such as these to achieve carbon neutrality. The Group's plants require hot water and steam for cleansing products and maintaining a clean room environment, and have been using fuel boilers for that purpose until now. The use of fuel inevitably produces CO<sub>2</sub>. However, with the utilization of electricity sourced from renewable energy via heat pumps, it is possible to reduce these emissions to zero.

The head office plant, scheduled for completion in August 2024, will be equipped with a heat pump system, serving as a model plant for achieving carbon neutrality. After that, we intend to complete installation of the system at the other locations by 2030.

## v Enhance other energy conservation activities: optimization of the air-conditioning equipment operation

We recognize that one of our challenges is to reduce CO<sub>2</sub> emissions. As part of our initiatives, we will present below our promotion system and energy conservation activities that enable lower electricity and fossil fuel consumption in our production processes and a reduction in CO<sub>2</sub> emissions.

At the Tottori Production Division, which has the largest production capacity in the Group, we implemented operational improvements on the centrifugal chiller in the existing air-conditioning system from June 2018 to March 2023. Consequently, the electricity consumption for the air-conditioning equipment decreased by approximately 17%, and the usage of fuel oil decreased by approximately 19%, resulting in an annual reduction of approximately 523 tons of CO<sub>2</sub> emissions.



Source: Emission factor by electric utility operator released by the Ministry of the Environment (for calculation of GHG emissions by specified emitters)  
<https://ghg-santeikohyo.env.go.jp/calc/denki> (available only in Japanese)  
 Conversion factor for electricity usage to CO<sub>2</sub> generation: 0.000441 (t-CO<sub>2</sub>/kWh)

## Comment from a person in charge of improvement

The Tottori Production Division employs a central air-conditioning system to regulate temperature and humidity. In this system, cooling/heat source equipment is installed. They deliver chilled water, hot water, and steam to each air-conditioning unit, which undergoes a heat exchange process to generate air that is adjusted for temperature and humidity.

Temperature control of the cooling/heat source equipment is critical in this system. The temperature of the centrifugal chiller, which produces chilled water, was set at approximately 10°C regardless of the season. However, Tottori is an area where temperatures differ considerably between summer and winter. So we assumed that it might be possible to find optimum temperature settings in response to outdoor temperature fluctuations, and began to investigate actual energy consumption.

The investigation revealed that the chilled water temperature supplied by the centrifugal chiller was too low, often resulting in an excess supply of hot water and steam for heating, especially during the winter season. We predicted significant energy savings due to a reduction in electricity consumption resulting from the adjusted cooling water temperature of the centrifugal chiller, along with a corresponding decrease in the use of fuel oil in the boiler that generates hot water and steam. However, at the Tottori Production Division, production takes place in a cleanroom with a constant temperature and humidity requirement. Therefore, the chilled water temperature needs to be adjusted to maintain this controlled environment. We thoroughly assessed the status together with internal personnel and external experts, and then made adjustments to the settings and repeatedly verified their effectiveness, confirming that no impact was generated.

## Environmental Initiatives

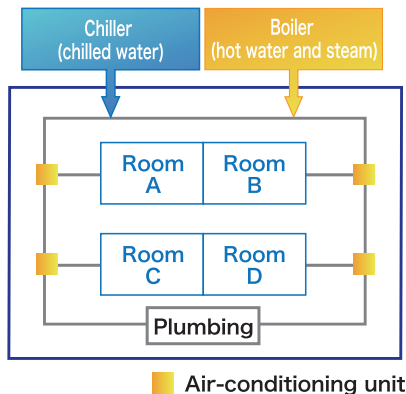
Ultimately, over the four years of improvement efforts, we effectively adjusted the chilled water temperature by approximately 4°C in winter and 1°C in summer. We were also able to implement new energy-saving measures, such as managing the discharge pressure and flow rate of chilled water, which we had not anticipated at the outset.

Energy conservation activities do not end once they prove effective. We need to pass on the expertise through management standards and training, while ensuring its ongoing effectiveness. We will keep taking on the challenge for further improvements and fostering the younger generation.

### Central air-conditioning system

Main application:

Large structures such as industrial plants and tall buildings  
 Large heating and cooling equipment installed to regulate temperature and humidity levels within the structure



## Promotion system for energy conservation and CO<sub>2</sub> emissions reduction

The Company has an employee recognition system to recognize excellence in improvement for energy conservation and CO<sub>2</sub> emissions reduction activities. Likewise, within the operation of the environmental management system (under ISO 14001) described below, we established environmental targets for energy conservation and CO<sub>2</sub> emissions reduction and are promoting corresponding activities. Thanks to these promotional efforts, the Company has been certified as Class S under the Business Classification Evaluation System\*, under the Act on the Rational Use of Energy (commonly known as the Energy Saving Act) every year since 2015. Going forward, we will further strengthen these activities to reduce CO<sub>2</sub> emissions.

\* A system in which the Ministry of Economy, Trade, and Industry assesses periodic reports submitted by business operators, categorizing them into classes S, A, B, and C based on the degree of improvement in energy consumption intensity

### Proper disposal of PCB waste

Waste generation is an unavoidable outcome of the Group's business operations. While we occasionally generate waste that is harmful to the environment or human health, we take full responsibility as a waste generator for ensuring the proper disposal of any waste in compliance with laws and regulations.

Regarding polychlorinated biphenyls (PCBs), whose toxicity is so high that the Act on the Regulation of Manufacture and Evaluation of Chemical Substances was enacted in 1973 to prohibit manufacturing and new use, complete disposal has not been achieved, and it is likely that a significant quantity of PCBs still remains in storage.

We conduct timely inspections of PCB waste storage and completed the disposal of high-concentration PCB waste in 2010. Low-concentration PCB waste was found in the power receiving equipment at Kanzaki Plant and Nishiwaki Plant during a survey conducted in December 2021. Therefore, we concluded a disposal consignment contract with a detoxification facility certified by the Minister of the Environment of Japan and an industrial waste management company licensed by the prefectural governor. We completed the disposal of all PCB waste in December 2022.



Low-concentration PCB waste is being transferred onto a specialized waste transport vehicle of a disposal company



## Implementation of environmental management system (under ISO 14001)

### ISO certification status

The Group has acquired the ISO 14001 international environmental management standard for all its production bases in Japan. This standard is designed to help organizations understand and responsibly manage the positive and negative impacts of their corporate activities on the environment. Our domestic offices and plants acquired integrated certification in 2000, which is implemented and operated as the management system. For overseas bases, certification is acquired on a region-by-region basis, while the management system is implemented for the entire Group as necessary in cooperation with domestic and overseas operations. We will conduct a review to ensure that the management system remains efficient and simple, all while maintaining ISO certification.

### Structure of environmental management organizations

An Environmental Management Committee has been established at each of our business bases and regions to implement ISO 14001 operations. This Committee plays a pivotal role in our environmental activities. In the Group Environmental Management Committee, which oversees all operations in Japan, personnel at all levels from management to front-line employees confirms societal requirements, including laws and regulations and customer demands, as well as internal environmental performance such as energy consumption, CO<sub>2</sub> emissions and waste management. Following this process, it deliberates on responses to these issues.

### Internal environmental audit

The Company conducts an internal environmental audit periodically to check the status of its management system. Each time we conduct internal environmental audits, we set focus points by considering any statutory or regulatory changes, issues of interest to our stakeholders and actual status of our activities, to conduct a balanced audit. The results of the audits are reported to the management, to discuss effectiveness and room for improvement, contributing to the continuous improvement of the Environmental Management System. Following such an audit, the Group Environmental Management Committee convenes to deliberate on the need to review the management system itself from a multifaceted perspective to ensure its validity and enhance its effectiveness, based on the issues and situations confirmed through an internal environmental audit.

The Group's environmental initiatives are in their early stages of development, and there is much work ahead. We anticipate encountering various obstacles, especially in our pursuit of carbon neutrality. Nevertheless, we will enhance our proactive promotion of our initiatives to achieve the "Scope 1+2" Carbon Neutrality Challenge in 2030. Our aim is not only to contribute to environmental conservation, but also to elevate corporate value through our commitment to environmental initiatives, which stands as one of our material issues.



## Corporate governance

### Our basic approach to corporate governance

**“We aim for decision-making that is prompt and accurate enough to respond to changes in the business environment, execution of business that is lawful and reasonable, and internationally competitive management that is fair and transparent for stakeholders.”**

The Company exerts efforts to enhance corporate value to protect and augment the interests of all stakeholders supporting its corporate activities and to maximize shareholder value in a long-term and consistent manner. At the same time, the Company believes it is essential to reinforce its corporate governance to become a company that earns trust from society. The Company’s management structure basically comprises the Board of Directors, which makes decisions on basic management policies and other important matters and supervises the execution of duties by the Representative Director and the Audit and Supervisory Committee, which supervises the execution of duties by the Directors who are not Audit and Supervisory Committee Members. The Board of Directors includes multiple Outside Directors. We ensure consistent performance supervision through the attendance of the full-time Audit and Supervisory Committee Member at important meetings. Furthermore, we facilitate communication with the Accounting Auditor to promptly incorporate professional and objective suggestions primarily revealed during accounting audits into our management practices.

To clarify our corporate governance structure and realize effective corporate governance, we have established the DAISHINKU Corporate Governance Guidelines.

URL : <https://www.kds.info/investors/management-policy/corporate-guideline/>  
(available only in Japanese)



You can access the DAISHINKU Corporate Governance Guidelines by scanning here.

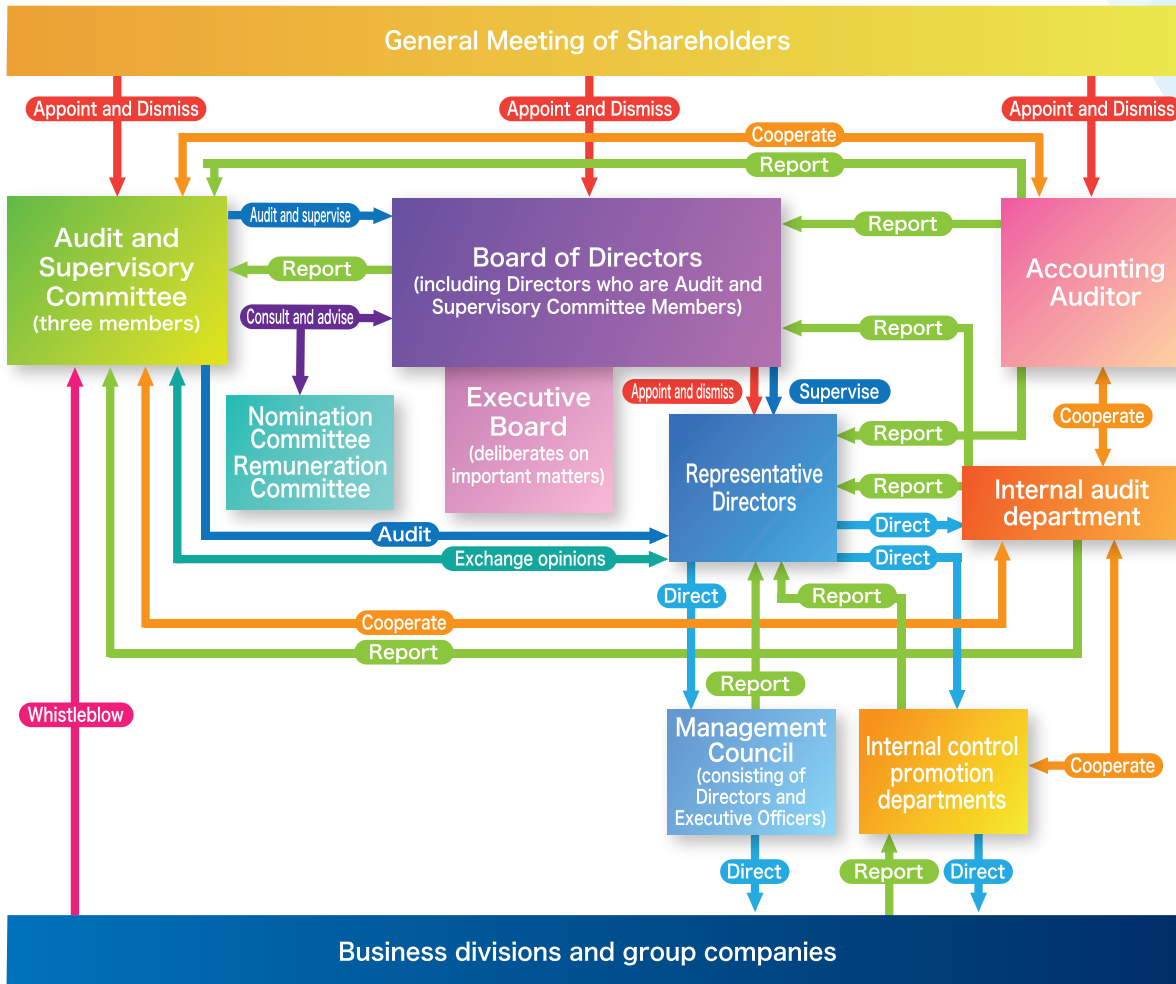
### Corporate governance structure

The Company has appointed four Outside Directors to enhance the supervisory function of management. Each of the Outside Directors is independent of the Company and possesses expertise in finance and accounting, or corporate legal affairs.

The Board of Directors convenes regularly and when necessary to ensure agile and flexible management. In addition, the Executive Board holds preliminary discussions on important matters related to management policies and strategies. Following these deliberations, the Board of Director makes decisions on their implementation. The Management Council, consisting of Directors and Executive Officers, meets to discuss specific management issues from a practical perspective.

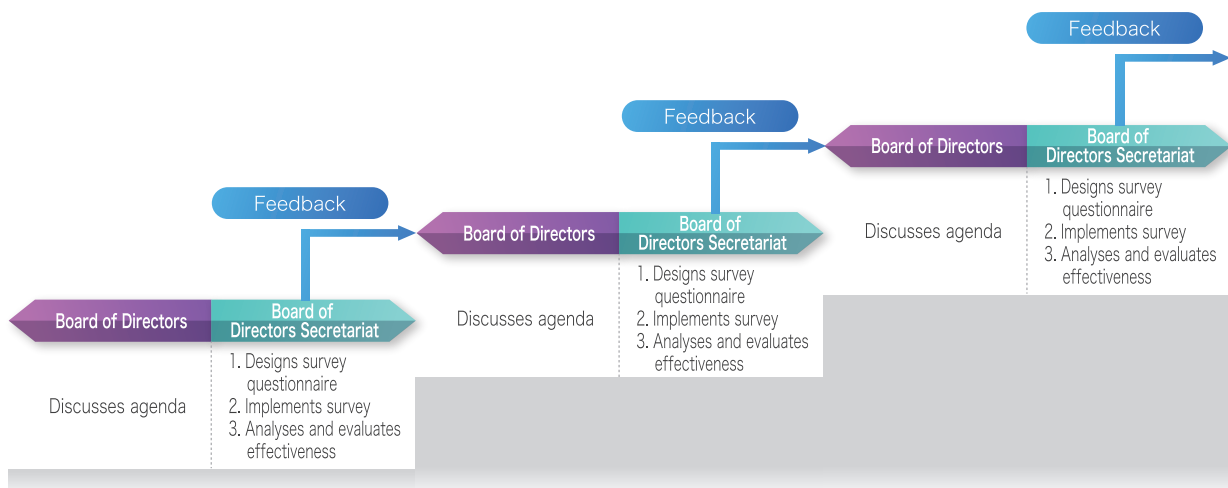
The Company has appointed two Outside Audit and Supervisory Committee Members to have them provide appropriate opinions regarding the Directors' performance of their duties from an independent and neutral viewpoint, thereby enhancing management supervision and monitoring. The Audit and Supervisory Committee holds regular meetings to enhance its supervision and auditing functions, while flexibly incorporating objective opinions and views from Outside Audit and Supervisory Committee Members.

Additionally, the Company established the Nomination Committee and the Remuneration Committee on November 11, 2022 to strengthen the supervisory function over the Board of Directors and further enhance the corporate governance structure by ensuring fairness, transparency and objectivity in the evaluation and decision-making process regarding the nomination and remuneration of Directors. Each committee consists of at least three Directors selected by a resolution of the Board of Directors, with the majority of committee members being independent Outside Directors. The chairs of the committees are selected through a resolution passed within each committee from among their members who are independent Outside Directors.



## Evaluation of the Board effectiveness and training efforts

The Company believes it is important to regularly verify the overall functionality of the Board of Directors and implement ongoing improvements based on the results of such verification. To that end, the Company conducts a questionnaire survey to evaluate the Board effectiveness. The Board of Directors Secretariat aggregates questionnaire surveys, provides feedback to all Directors, and ensures they reflect this input on the management of the Board of Directors meetings, thereby enhancing the functions of the Board of Directors.



In light of the summary of the questionnaire surveys, the Company has concluded that the Board of Directors functioned effectively, as each director thoroughly examined the agenda in advance and participated in open, vigorous, and constructive discussions and exchanges opinions during the Board of Directors meetings.

Further, external instructors are regularly invited to conduct study sessions for management including executive officers, which cover topics such as the cost of capital and corporate value enhancement. Directors also participate in external training programs and other activities to enhance their insights and competencies, which include gaining essential knowledge and deeper understanding of their positions, with the goal of fulfilling their required roles and responsibilities.

# Compliance / Risk Management

## Internal control

Regarding the status of the Internal Control System, we have established the Code of Conduct on CSR to ensure that Directors and employees comply with laws and regulations, as well as the Articles of Incorporation, and respect ethical principles in their actions. In addition, we promote the establishment, maintenance and improvement of the Internal Control System, while concurrently operating a whistleblowing system that allows Directors and employees to report any suspicious compliance violations to the Company through a whistleblowing contact.

As for the status of internal audits and audits by the Audit and Supervisory Committee, we have established the internal audit department with the function of monitoring internal control. The department conducts audits not only of our internal operations but also of subsidiaries and associates from a Group management perspective. The Audit and Supervisory Committee maintains a close collaborative relationship with the internal audit department. In the execution of its auditing duties, which include examining the Company's operations and assets, the Committee receives reports on audit plans and results from the internal audit department. Directors who are not Audit and Supervisory Committee Members, along with the general affairs and finance departments responsible for internal control functions, submit reports on the status of the Internal Control System. These reports are effectively utilized in the auditing process of the Audit and Supervisory Committee to ensure efficient audits.

URL: <https://www.kds.info/company/csr/>



You can access the DAISHINKU CSR Code of Conduct by scanning here.

## Risk management

Concerning the status of the risk management system, the Company has established the Risk Management Regulations to identify, understand and comprehensively manage various risks surrounding the Company. If an unexpected event occurs, the Company will set up a task force to take appropriate measures and develop a crisis management system appropriate to the information age as a global group of enterprises.

## Compliance

**“Thorough compliance meeting society’s expectations and requirements”**

At the Group, in addition to the observance of all applicable laws and regulations and internal rules, we ensure that our corporate activities meet society's requirements. Moreover, we endeavor to be a corporation whose each and every employee engages in business activities in a fair and sincere manner, maintaining society's trust, ensuring our continued development, and contributing to realizing a sustainable society.

### < Compliance education >

To effectively promote legal compliance in our corporate activities, we believe it is important to educate employees to equip them with the necessary legal knowledge and criteria to serve as a foundation for their conduct and sound and practical decision making in various business situations. We promote various educational programs on legal compliance to raise employee awareness on the importance of compliance and improve their knowledge. These programs are held as a part of our regular personnel development programs, and offered at the time of recruitment, promotion to higher-grade or executive posts, and other milestones.

### <Information security>

Information security is one of the most important conditions that must be fulfilled to conduct business normally and smoothly. Societal need for information security is expected to grow even more strongly in the future. To remain a trusted company, the Group has established the “Information Security Basic Policy” aimed at protecting our information assets and other related internal regulations and is working on development and improvement of rules and systems for appropriate handling of information. Further, Regulations on Cyber Security Measures have been established to respond to cyberattacks, so that appropriate measures can be taken against cyberattacks, including vulnerability measures, technological measures, personal measures, and threat monitoring. The Company intends to continually strengthen its technological measures against ever-evolving malware\*. In fiscal 2022, the Company worked to enhance client information security.

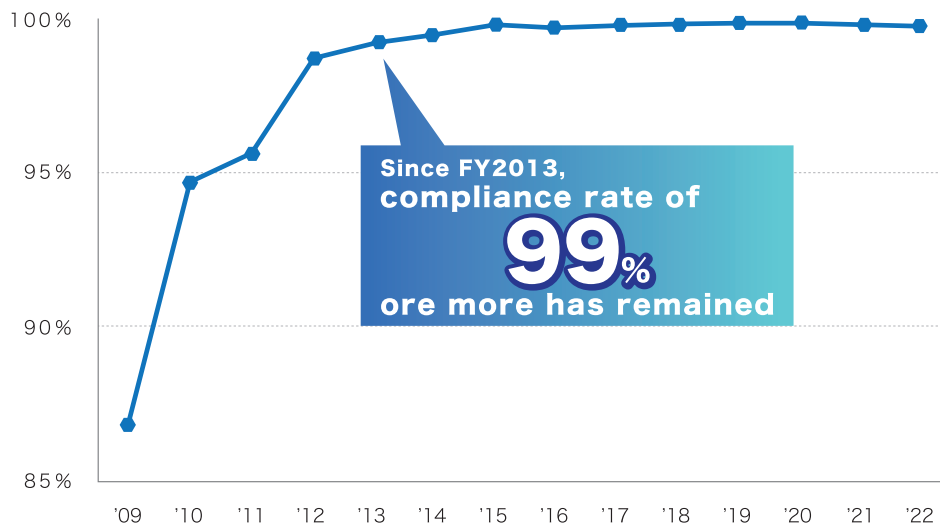


In the meantime, since there is a limit to ensuring information security through only technological measures, and awareness of each employee is important, we will continue to develop rules focused on early detection and strengthening of responses, as well as reinforce personal measures through employee education. Furthermore, in fiscal 2022, we conducted a hands-on email security training to enhance our employees' ability to combat malware by improving their response to suspicious emails. The training involved sending pseudo-targeted attack emails to all employees on an irregular basis. As a result, it was found insufficient in some instances. Therefore, our challenges include raising information security awareness and ensuring all employees are well-prepared to address cybersecurity issues.

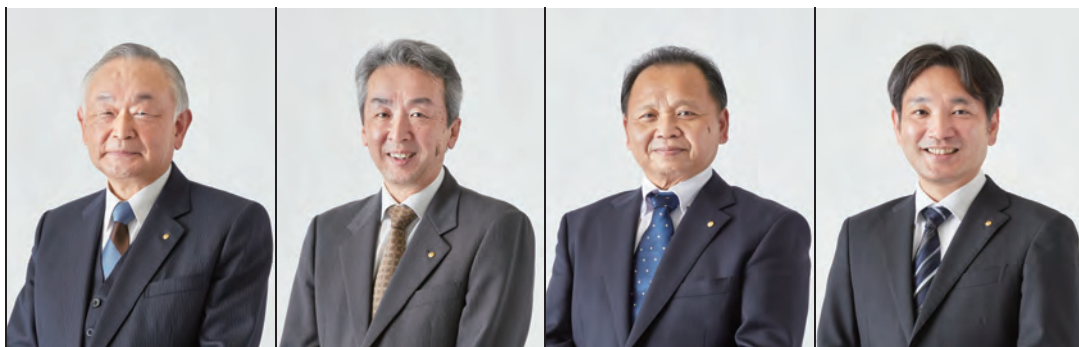
We will continue to develop rules focused on early detection and effective responses to cyberattacks, while reinforcing personal measures through employee education.

\* Malicious programs and software designed to harm users

Information security self-Inspection check compliance rate



# Directors and Officers



Name	Sohei Hasegawa	Minoru Iizuka	Masashi Kawasaki	Shimpei Hasegawa
Position	Chairman	President	Managing Director	Director
Major career history	<p>Apr. 1977 Joined the Company</p> <p>Apr. 1989 General Manager of Computer &amp; Telecommunication Division</p> <p>June 1989 Director, General Manager of Computer &amp; Telecommunication Division</p> <p>June 1991 Managing Director, Manager of Sales Department and Manager of Computer &amp; Telecommunication Department</p> <p>July 1992 Representative Senior Managing Director, General Manager of Sales Management Division and Manager of Computer &amp; Telecommunication Department</p> <p>June 1994 General Manager of Sales Management Division</p> <p>Nov. 2000 President</p> <p>Oct. 2019 General Manager of Marketing &amp; Sales Division</p> <p>July 2021 Chairman (current position)</p>	<p>Apr. 1985 Joined the Company</p> <p>Feb. 2004 Manager of Research Laboratory I, Central Laboratory</p> <p>June 2014 Director</p> <p>July 2014 Deputy Director of Central Laboratory</p> <p>Apr. 2015 Deputy Manager of Production Division</p> <p>Jan. 2017 General Manager of Product Division</p> <p>Apr. 2017 Managing Director</p> <p>July 2018 In charge of business management</p> <p>Apr. 2019 Senior Managing Director</p> <p>Oct. 2019 Director and Senior Vice President, Manager of Fundamental Technological Development Department</p> <p>July 2021 President (current position)</p>	<p>Mar. 1978 Joined the Company</p> <p>Nov. 1990 Manager of Engineering Department, Tottori Plant II</p> <p>Apr. 2002 Manager of Production Engineering Department</p> <p>July 2004 Director of Tokushima Production Division</p> <p>July 2008 President of Tairjin KDS Corp.</p> <p>Apr. 2015 Director of Kanazaki Plant</p> <p>Apr. 2016 Manager of Material Business Development Department</p> <p>July 2018 Executive Officer, General Manager of Material Business Development Division</p> <p>June 2020 Director</p> <p>July 2021 Managing Director (current position)</p> <p>Jan. 2023 General Manager of Administrative Division and General Manager of Material Business Development Division (current position)</p>	<p>Jan. 2006 Joined the Company</p> <p>Jan. 2017 Manager of Research Department</p> <p>July 2018 Executive Officer, Deputy General Manager of Marketing &amp; Sales Division</p> <p>July 2018 Manager of Sales Strategy Department</p> <p>Apr. 2019 Deputy in charge of business management</p> <p>Apr. 2020 Deputy General Manager of Marketing &amp; Sales Division</p> <p>June 2020 Director (current position)</p> <p>Apr. 2022 Managing Executive Officer, General Manager of Office of the President</p> <p>Jan. 2023 Senior Managing Executive Officer, General Manager of Marketing &amp; Sales Division (current position)</p>
Reason for appointment	<p>After serving as the executive manager of the Computer &amp; Telecommunication and Sales divisions of the Company, he was appointed President in November 2000, and Chairman in July 2021. With his extensive experience and broad knowledge as a member of the management, he represents our Group, and focuses on further improving our corporate value by executing duties resolved by the General Meeting of Shareholders or the Board of Directors.</p>	<p>After serving as the executive manager of the Development &amp; Technology and Production divisions of the Company, he was appointed Director and Senior Vice President in October 2019, and President in July 2021. With his extensive experience and broad knowledge, he represents our Group, and focuses on further improving our corporate value by executing duties resolved by the General Meeting of Shareholders or the Board of Directors.</p>	<p>He has a wealth of experience and broad knowledge with many years of service as the manager of the Development &amp; Technology and Production divisions of the Company. He was appointed Managing Director of the Company in July 2021. He assists and advises Representative Directors with his extensive experience and broad knowledge, and discusses important matters related to overall management.</p>	<p>He has been in charge of Sales and Marketing divisions at the Company for many years, has a wealth of experience and broad knowledge, and participates in the formulation of basic management policies.</p>
Attendance at Board of Directors meetings in FY2022	12/12	12/12	12/12	12/12
Committee membership				
Nomination Committee		●		
Remuneration Committee	●			
Skill matrix				
Management strategy	●	●	●	●
Finance & accounting				
Law & governance	●	●		
Global business	●	●	●	●
DX & technology	●	●	●	
Sustainability & diversity	●	●		
HR development	●	●	●	●






\* The above list does not necessarily represent all the experience and expertise of each officer.

## Criteria for assessing each director's skills

Management strategy	Experience as a (representative) director or an executive director with special title in a listed company or equivalent Experience as an outside director in a listed company or equivalent
Finance & accounting	Experience as an in-charge officer, general manager or manager of an accounting department; a manager responsible for accounting operations; or a practitioner qualified as certified public accountant or certified public tax accountant
Law & governance	Experience as a chief legal or compliance officer; an in-charge officer, general manager or manager of a legal department; a manager responsible for legal affairs; or a practitioner as judge, prosecutor or attorney at law
Global business	Experience as a manager in charge of overseas business, a president of overseas subsidiaries or equivalent
DX & technology	Experience as an in-charge officer, general manager or department manager of a systems department, or a practitioner responsible for technical operations
Sustainability & diversity	Experience as a chief sustainability officer, an in-charge officer, general manager or manager of a sustainability-related department; or a practitioner responsible for sustainability-related operations; or a practitioner in charge of diversity management
HR development	Experience as a chief HR officer, an in-charge official, general manager or manager of an HR-related department; or a practitioner responsible for HR-related operations

## Executive Officers

Senior Managing Executive Officer	General Manager of Marketing & Sales Division	Shimpei Hasegawa	Executive Officers	General Manager of Production Engineering Division	Ichiro Okuda
Managing Executive Officer	Deputy General Manager of Marketing & Sales Division	Hirofumi Okahara	Executive Officers	Deputy General Manager of Administrative Division	Osamu Kazuuma
Managing Executive Officer	General Manager of Production Division	Toshiro Hiroshima	Executive Officers	General Manager of Quality Assurance Division	Tatsuya Murakami
Senior Executive Officer	General Manager of Finance & Accounting Division	Kuniharu Hayashi	Executive Officers	General Manager of Engineering Division	Takashi Shirai
Senior Executive Officer	General Manager of Alliance Promotion Division	Kohei Hasegawa	Executive Officers	Deputy General Manager of Engineering Division	Takuya Kojo
Senior Executive Officer	General Manager of Marketing (R&D) Division	Katsuyuki Nakamura	Executive Officers	Deputy General Manager of Marketing & Sales Division	Jun Mizui
Senior Executive Officer	General Manager of Management Planning Division	Taiku Kawashima			

				
Toshiaki Kotera	Keiko Iijima	Hiroshi Maeda	Keita Ushijima	Toshiaki Hanasaki
Outside Director	Outside Director	Director Audit and Supervisory Committee Member	Outside Director Audit and Supervisory Committee Member	Outside Director Audit and Supervisory Committee Member
Apr. 1992 Joined Kotera Accounting Office Sep. 1992 Qualified as Certified Public Tax Accountant June 2007 Outside Corporate Auditor of the Company June 2015 Outside Director (current position)	Apr. 1995 Appointed as Judge (In Sapporo, Chiba, Osaka, Matsue and Kyoto) Mar. 2009 Retired June 2009 Registered as a practicing attorney (current position) June 2016 Outside Director of the Company (current position) June 2022 Outside Corporate Auditor of Keifuku Electric Railroad Co., Ltd. (current position)	Apr. 1982 Joined the Company Apr. 2009 Manager of Management Planning Division June 2012 Director July 2014 Managing Director, Manager of Management Planning Division and Manager of Sales Production Control Division Apr. 2015 Manager of Management Planning Division and General Manager of Administration Division July 2016 General Manager of Administration Division July 2018 In charge of administration management Apr. 2019 General Manager of Finance Division June 2020 Full-time Corporate Auditor June 2022 Director (Full-time Audit and Supervisory Committee Member) (current position)	Apr. 1979 Employed by Osaka Regional Taxation Bureau July 2007 District Director of Mikai Tax Office July 2008 Director of Transfer Pricing Division, First Large Enterprise Examination Department, Osaka Regional Taxation Bureau July 2010 Director of Review Division (Large Enterprise Examination), First Large Enterprise Examination Department, Osaka Regional Taxation Bureau July 2011 Director of Management Division (Large Enterprise Examination), First Large Enterprise Examination Department, Osaka Regional Taxation Bureau July 2012 Deputy Assistant Regional Commissioner (Management and Coordination) July 2013 District Director of Sakai Tax Office Apr. 2014 Representative of Keita Ushijima Tax Accountant Office (current position) June 2015 Outside Corporate Auditor of the Company June 2022 Outside Director (Audit and Supervisory Committee Member) (current position)	Apr. 1977 Employed by Osaka Regional Taxation Bureau July 2006 District Director of Kabara Tax Office July 2007 Director of Co-ordinated Examination and Information Management Division, First Large Enterprise Examination Department, Osaka Regional Taxation Bureau July 2009 Director of Co-ordination Division (Large Enterprise Examination), First Large Enterprise Examination Department, Osaka Regional Taxation Bureau July 2010 District Director of Tondabayashi Tax Office July 2011 District Director of Utagawa, First Taxation Department, Osaka Regional Taxation Bureau July 2012 District Director of Hiraiji Tax Office Aug. 2013 Representative of Hanasaki Tax Accountant Office (current position) June 2016 Outside Corporate Auditor of the Company June 2022 Outside Director (Audit and Supervisory Committee Member) (current position)
Although he has no experience of being directly involved in corporate management other than as an outside officer, as a certified public tax accountant he is familiar with corporate management through his tax practices, and properly performs his duties from an objective and neutral standpoint.	Although she has no experience of being directly involved in corporate management other than as an outside officer, as a practicing attorney she is familiar with corporate management through her practice of corporate legal affairs, and properly performs her duties from an objective and neutral standpoint. The Company has an advisory contract with Park Sogo Law Office, to which Keiko Iijima belongs, but the amount of remuneration is minimal.	After serving as the executive manager of the Management Planning division of the Company for many years, he has been discussing important matters concerning the overall management of the Company as Managing Director since July 2014. Based on his business experience, he is familiar with internal control, risk management, and compliance promotion, and has knowledge to conduct appropriate audits of management decision-making and business execution.	Although he has no experience of being directly involved in corporate management other than as an outside officer, as a certified public tax accountant he is familiar with corporate management through his tax practices, and properly performs his duties from an objective and neutral standpoint.	Although he has no experience of being directly involved in corporate management other than as an outside officer, as a certified public tax accountant he is familiar with corporate management through his tax practices, and properly performs his duties from an objective and neutral standpoint.
12/12	12/12	12/12	12/12	12/12
●	●			
●	●	●	●	●
●	●	●	●	●
	●	●		
		●		
		●		
		●		

Overview of each body

Body	Constituent members	Activities
Board of Directors	Director	Determining basic management policies and important matters, and supervising the operational execution of Representative Directors
Management Council	Executive Directors and Executive Officers	Discussing individual management issues from a practical perspective
Nomination Committee	President and Outside Directors who are not Audit and Supervisory Committee Members	Enhancing the independence, objectivity, and accountability of the Board of Directors' functions in selecting and dismissing senior management (Representative Directors and Executive Directors) and nominating candidates for the Board of Directors
Remuneration Committee	Chairman and Outside Directors who are Audit and Supervisory Committee Members	Enhancing the independence, objectivity and accountability of the Board of Directors' functions associated with senior management (Representative Directors and Executive Directors) and Directors' remuneration

Remuneration for Directors

Directors (eight persons excluding Audit and Supervisory Committee Members)	123,909 thousand yen
Of which Outside Directors (two persons)	11,700 thousand yen
Directors (three persons who are Audit and Supervisory Committee Members)	14,580 thousand yen
Of which Outside Directors (two persons)	6,480 thousand yen
Corporate Auditors (four persons)	7,380 thousand yen
Of which Outside Corporate Auditors (two persons)	1,680 thousand yen

As of the end of the reporting period, there were six Directors (excluding Directors who are Audit and Supervisory Committee Members) and three Directors who are Audit and Supervisory Committee Members. The number of Directors and Corporate Auditors differs from that in the table above. This is because two Directors and four Corporate Auditors all of whom retired at the conclusion of the 59th Annual General Meeting of Shareholders held on June 29, 2022, are included in the number of persons in the table. (Of those four Corporate Auditors, three were elected as Directors who are Audit and Supervisory Committee Members and assumed office at that General Meeting of Shareholders.) The Company transitioned from a company with a Board of Corporate Auditors to a company with an Audit and Supervisory Committee on June 29, 2022.



Director (Outside)  
Member of the Nomination Committee

## Keiko Iijima



## Message from an Outside Director

### Governance Structure of DAISHINKU

The Group is a comprehensive manufacturer of timing devices, primarily synthetic quartz crystals. The devices it manufactures are integrated into and used for a broad range of applications including smartphones and medical equipment, which have become essential to people's lives with the sophistication of digital technologies across society; self-driving automobiles, which are increasingly put on the market; and industrial robots.

The demand for these devices are expected to further grow in the future. We believe the growth and corporate value of the Company, from the perspective of business execution, depend on how we can deliver superior products at the right price by adapting to changes in the market environment. Looking at this from the perspective of the Board of Directors' monitoring function, we have recognized it is important that, in making decisions on matters such as management policy and strategy as well as important transactions, independent Outside Directors actively participate in discussions drawing on their expertise, and point out problems without being bound by the Company's traditional practices.

For Outside Directors to serve in these roles, it is important that they are provided with sufficient information; a reasonable number of Outside Directors have been

appointed; the experience, expertise, and diversity of Outside Directors are well balanced, for instance. The Company distributes the Board meeting materials, including PowerPoint materials that are easy to understand for Outside Directors, before the Board of Directors' meetings. In addition, Outside Directors are able to obtain more specific information, such as what issues are taking place at offices and plants and how they can solve them, by attending a meeting of the management council held the day before the board of directors' meeting. I also made site visits to the Tottori Production Division, Nishiwaki Plant, and Tokushima Production Division, where I entered a clean room to see production lines, and came across a moment when a synthetic quartz crystal weighing as much as 800 kg was taken out of a growing furnace after several months of cultivation. Further, at the Board of Directors meetings, half of which is composed of independent Outside Directors who are certified public tax accountants or attorneys at law, each member including a female member like me can feel free to express frank opinions. Some members also give detailed advice on matters that require attention from a legal perspective, although such advice may not affect the conclusion of the agenda. Responses to our proposals are also quick. When we proposed to conduct a drill against

cyberattacks, the Company immediately planned and held the drill. This way, the Company's Board of Directors has developed an atmosphere where the free and frank exchange of opinions are respected. I therefore believe the Board has functioned quite effectively.

Through my 28 years of experience as a judge and a practicing attorney at law, I have been involved in almost all kinds of litigation and dispute-resolution cases, including civil litigation, damage lawsuits against governments, lawsuits against local governments, bankruptcy cases, labor disputes, and criminal litigation.

Also, as an attorney at law for companies and local governments, I am routinely engaged in consultation and legal checkup, and have served as a member of deliberation councils of government agencies and as director and other important posts at public interest incorporated foundations. From these experiences, I have learned that many of disputes and discord cause great damage to companies, and therefore, believe it is important that they place emphasis on developing an organizational culture that facilitates day-to-day communication, and I have actually focused my attention on this point. In fact, I feel that each and every

employee of the Company has a heightened awareness that they need to pursue the following three types of trust: trusted people, trusted products, and trusted company, which we can see from their words and behaviors at various opportunities, including the Board of Directors' meetings and the management council's meetings.

The Company is able to grow and achieve its goals only when each employee respects its values and fully taps their potential in the direction they should take. Therefore, I believe that our corporate governance has functioned fairly well in our corporate culture, where our employees act in accordance with the "total optimization" approach to generate profits and are motivated to work diligently. As noted above, while the Company has operated business with due consideration to corporate governance, it has recently focused on developing employees as its stakeholders. To this end, the Company has conducted a survey on the strengths of each work place and provided young employees with opportunities to make presentations. I hope that you take interest in our products which are close and essential to your living, although they are small in size, and appreciate your continued patronage.

## My impression of DAISHINKU

- Group-wide pursuit to achieve the following three types of trust: trusted people, trusted products, and trusted company
  - Quick response to proposals from Outside Directors
  - Corporate governance-conscious business management

Director  
Full-time Audit and  
Supervisory Committee Member

## Hiroshi Maeda



## Message from the Chair of the Audit and Supervisory Committee

### Changes in the Institutional Design

The Company has sought to enhance its corporate governance in a bid to achieve its continued growth and improve its corporate value over the medium to long term. We are now urged to further enhance our corporate governance as Japan's Corporate Governance Code was revised in June 2021, while the business environment surrounding the Company has been changing dramatically. Under these circumstances, we have transitioned from a company with a Board of Corporate Auditors to a company with an Audit and Supervisory Committee, with the aim to speed up management decision-making and further strengthen the supervisory function of the Board of Directors. The transition was resolved at the General Meeting of Shareholders held in June 2022.

In addition, at its 60th anniversary in November 2019, the Company announced its first 10-year long-term business plan "OCEAN+2 Strategy" covering the period up to the fiscal year ending March 31, 2030. Then, next year, the Company made clear the details of the "OCEAN+2 Strategy" including a numerical target to achieve an operating profit of 10 billion yen.

Then, in May 2021, the Company released the 1st Medium-term Plan "Developing a Foundation" (covering fiscal

2021 to fiscal 2023), and also made clear that it aimed to achieve ROIC of 6% or more and ROE of 10% or more. To implement these business plans and improve corporate value, we believe the transition to a company with an Audit and Supervisory Committee was appropriate. While aiming for an even better monitoring model, we will continue efforts to maintain its effectiveness.

In general, each corporate auditor performs their duties under the independent appointment system under which each member of a Board of Corporate Auditors can exercise their own authority independently, while an Audit and Supervisory Committee is said to conduct what is called an organizational audit. Therefore, the Audit and Supervisory Committee is expected to conduct audits based on the evaluation and verification that a solid internal control system is in place and functioning properly. Whether an Audit and Supervisory Committee functions properly depends largely on how well the internal audit departments serve in its roles. We believe that the internal audit departments of the Company is expected to adequately fulfill its roles as it had collaborated with the Board of Corporate Auditors before the transition. In addition, by electing Audit and Supervisory Committee Members, the Audit and Supervisory Committee



is allowed to perform activities with the authority equivalent to that of corporate auditors under the independent appointment system. The Committee can therefore make use of the skills and auditing methods developed through the activities of the Board of Corporate Auditors. In terms of the content of audit, we consider taking the following measures to strengthen the supervisory function of the Board of Directors, one of the objectives of the transition this time.

As the Audit and Supervisory Committee needs to form a consensus for the appointment, remuneration, etc. of Directors who are not Audit and Supervisory Committee Members, the Committee audits the content of discussions, etc. made through the process until such Directors are appointed and their remuneration is determined. Further, the Committee needs to raise the proportion of its audit on executive officers and other key personnel, including how they have executed key measures set out in our medium- to long-term business plans, its appropriateness, and how they have addressed ESG.

To enhance the effectiveness of audits, etc. by the newly established Audit and Supervisory Committee, the Company decided to elect one full-time Audit and Supervisory Committee Member as in the case of the election of a full-time Corporate Auditor which is mandatory for a company with a Board of Corporate Auditors. I myself have been elected as the full-time Audit and Supervisory Committee Member. The full-time Audit and Supervisory

Committee Member attends important meetings, requests reports from business execution departments as needed to gather information about the status of business execution of the Company as well as the Group companies. The full-time Audit and Supervisory Committee Member also receives reports on audit plans and audit results of the internal audit departments and proactively exchange opinions and information about internal control audit.

Part-time Audit and Supervisory Committee Members are updated on the status of these audits at the Audit and Supervisory Committee meetings, and exchange opinions with the management as needed, and express necessary opinions from professional, objective, and multifaceted viewpoints. Further, the Audit and Supervisory Committee Members periodically hold debrief meetings with the Accounting Auditor to discuss audit plans, quarterly reviews, and year-end audits to ensure good communication with the Accounting Auditor through the exchange of opinions and information.

In closing, I would like to note that I feel both excited and humbled by the huge responsibility in my new role as Chair of the Audit and Supervisory Committee following the change in the institutional design. For the Company to live up to the expectations of all its stakeholders, as a company with an Audit and Supervisory Committee, I will make every effort to contribute to sustainable growth of the Company and enhancement of its corporate value over the medium to long term, while fulfilling the role of my own.

	All members (persons)	Full-time members (persons)	Inside Directors (persons)	Outside Directors (persons)	Chair
Audit and Supervisory Committee	3	1	1	2	Inside Director



# Digital Transformation (DX) Initiatives

## Overhaul of Core System

Currently, the Company is moving forward with the overhaul of its core system as part of its operational reform initiatives. The Company's core system, which is based on a general-purpose system introduced more than 20 years ago, underwent repeated migration to open system platforms and hardware replacement. Subsequently, the core systems for plant, purchasing, logistics and other operations have been developed/strengthened using open system platforms. This way, as the Company's core system is built on a combination of several development languages and system platforms, it has a problem with real-time information reference. As a result, indirect departments are forced to perform many tasks to make up for shortcomings of the current system. This has also posed a problem to information system departments in terms of development, operation, and management.

As such, the Company is moving forward with a project to overhaul its core system, which was launched in 2019. In doing so, we have set two basic policies: To eliminate the situation where certain tasks are dependent on skills and experience of particular employees by standardizing operations globally, including at overseas subsidiaries; and to improve operational efficiency by centralizing data. To streamline and standardize operations, we are introducing packaged systems and capitalizing on our strengths nurtured through our founding business to eliminate redundancies. Also, we have shifted our system platform to a data center to enhance the robustness and security of our core system, and have implemented BCP measures, while assuming its operation using the cloud computing in the future. Currently, we are introducing packaged systems to domestic offices and production bases including the subsidiaries, and plan to put them into operation in fiscal 2023. We are going to roll out the frameworks standardized in Japan to overseas subsidiaries in phases.

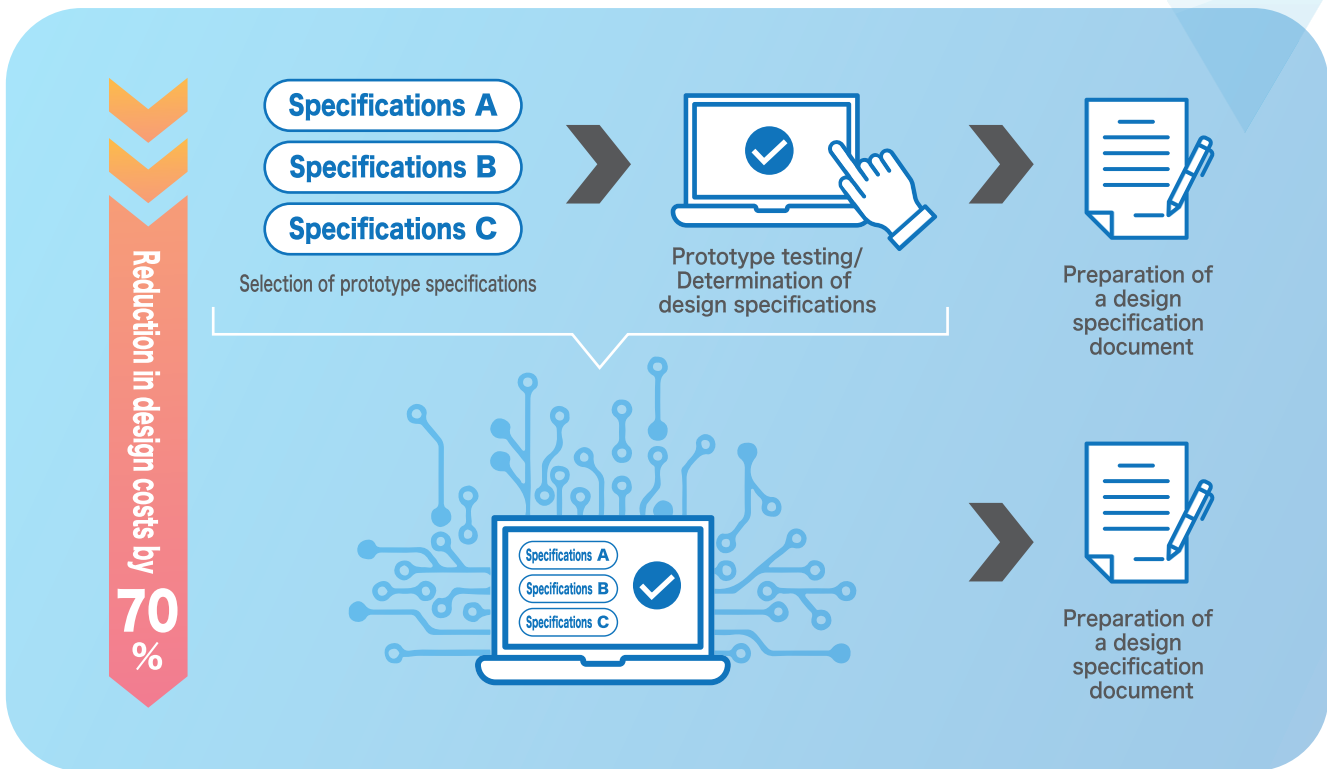


On top of the above, we have been working on a range of initiatives, including turning our plants into smart factories, introducing customer management and sales support tools, and automating manual administrative tasks using the RPA tools, to cover operations that cannot be complemented with the core system alone. In addition, as part of our work style reform initiatives, we have worked to build infrastructure that allows our employees to choose where they work from a variety of choices, including working from home, provides them with the work environments where they feel comfortable working, and helps respond quickly to customers.

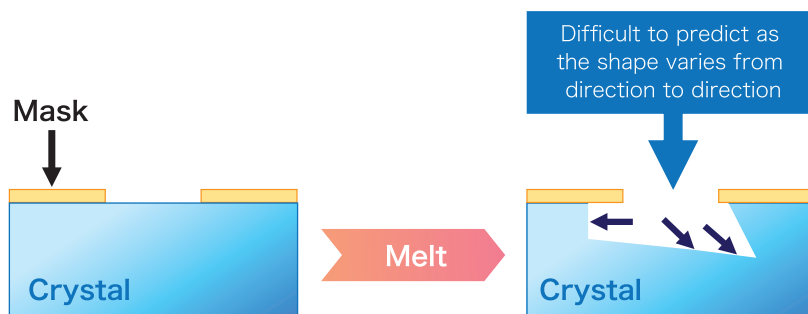
## Toward automating design work

Design work for crystal devices, our mainstay products, depends heavily on the experience and skills of engineers, which has posed a challenge for us to automate design work. As such, the Company has worked on a digital transformation (DX) of its design work using simulations since a few years ago. Through the DX, we aim to reduce design costs by 70% or more from the current level through initiatives for improving and stabilizing operational efficiency, such as reducing the work load on engineers, eliminating its dependency on the experience and skills of engineers, shortening the lead time to mass production, and building a database.

Until recently, engineers selected prototype specifications based on their experience and then determined design specifications through testing with prototypes before preparing design specification documents. As the first step of DX, we have worked to digitalize the processes from the selection of prototype specifications to the determination of design specifications using simulations. We are thinking of ultimately building a system that fully automates the entire processes from the receipt of an order sheet with all the specifications described on it to the preparation of a design specification document.



At present, however, we have not yet reached a level where we can leave everything to the system without human intervention because the simulation results contain errors from time to time. The fact that the simulation results may contain some errors implies that the calculations are not fully accurate. One of the main causes of such errors lies with the anisotropy of crystals. Anisotropy refers to the structural property of non-uniformity in different directions. This anisotropic nature makes it difficult to predict the shape of a quartz crystal produced through the photolithography process, making errors greater in the simulation of the vibration characteristics of a quartz crystal based on its shape. We believe that resolving such errors and improving the accuracy of simulations are one of our important challenges.



For everyone to easily perform simulations, we need to design a system that helps automate complex calculation procedures and processes. We believe, however, speeding up calculations by increasing the efficiency of such automatic processing is also essential to resolving the issue. In fact, we have made an approach to this issue from both hardware and software perspectives.

While we are faced with diverse challenges, we have accumulated experiences for more than 10 years in the simulation of the vibration characteristics (setting various conditions for generating specified vibrations) of crystal devices, and have achieved meaningful outcomes. We perform more than 10 simulations on average annually, thereby contributing to improving the efficiency of design work by reducing the number of prototypes and resolving issues by analyzing vibration mechanisms. Recently, we consider performing a simulation to predict the shape of a crystal plate, which depends on the anisotropic nature; and have worked to build a system that facilitates automatic processing, aiming to automate a range of procedures and processes in five years' time.



# 10-year Financial Data

## Consolidated Balance Sheets

Unit: Million yen

<b>Assets</b>	'14.3	'15.3	'16.3	'17.3	'18.3	'19.3	'20.3	'21.3	'22.3	'23.3
<b>Current assets</b>	32,087	33,515	36,892	36,974	35,507	34,431	38,005	39,937	47,049	46,711
Cash and deposits	12,033	13,076	18,338	17,203	15,602	13,940	15,321	14,316	18,516	18,517
Notes and accounts receivable - trade	7,584	7,231	6,846	7,319	7,059	6,424	8,162	9,318	9,940	9,514
Electronically recorded monetary claims - operating	-	-	42	61	65	49	60	58	-	-
Contract assets	-	-	-	-	-	-	-	-	204	173
Securities	1,870	2,071	2,124	360	829	-	30	-	-	39
Merchandise and finished goods	3,057	3,570	2,716	3,145	4,332	5,786	4,531	5,142	5,839	7,221
Work in process	3,551	3,674	3,102	3,074	2,904	3,115	3,932	4,822	4,976	5,292
Raw materials and supplies	2,510	2,543	2,627	3,214	3,438	3,864	4,617	4,824	5,716	4,660
Deferred tax assets	250	37	65	306	-	-	-	-	-	-
Allowance for doubtful accounts	-14	-11	-9	-12	-12	-1	-1	-10	-9	-9
Other	1,243	1,321	1,039	2,301	1,287	1,252	1,351	1,465	1,864	1,301
<b>Non-current assets</b>	25,504	23,406	23,534	23,844	23,807	23,999	24,989	28,690	34,268	36,910
Property, plant and equipment	23,181	20,471	20,276	20,400	20,547	20,793	21,962	23,778	27,684	30,585
Buildings and structures, net	5,882	5,425	4,770	3,734	3,419	3,114	3,032	3,097	3,166	3,132
Machinery, equipment and vehicles	9,679	7,657	7,704	8,220	9,114	8,822	8,759	11,347	12,533	13,069
Tools, furniture and fixtures	1,114	938	858	817	878	859	865	879	969	1,150
Land	5,737	5,795	5,674	5,704	5,703	5,801	5,771	5,835	5,803	5,920
Leased assets	-	-	777	704	635	864	724	624	510	414
Construction in progress	766	654	491	1,218	795	1,331	2,808	1,993	4,701	6,896
Intangible assets	261	259	219	168	165	150	140	134	569	1,184
Goodwill	22	8	-	-	-	-	-	-	-	-
Other	238	250	219	-	-	-	-	-	-	-
Investments and other assets	2,062	2,675	3,038	3,275	3,094	3,055	2,886	4,777	6,013	5,141
Investment securities	1,644	2,080	1,687	1,716	1,558	1,521	1,524	2,636	3,276	2,812
Long-term loans receivable	0	0	0	0	0	1	0	1	1	1
Retirement benefit asset	-	-	-	-	-	-	-	485	720	678
Deferred tax assets	41	81	178	340	406	393	400	443	800	756
Allowance for doubtful accounts	-107	-79	-79	-79	-79	-79	-79	-27	-27	-27
Other	484	592	1,251	1,298	1,208	1,219	1,040	1,238	1,241	919
<b>Total assets</b>	57,592	56,921	60,427	60,819	59,315	58,431	62,995	68,627	81,317	83,622
<b>Liabilities</b>										
<b>Current liabilities</b>	12,278	13,569	13,680	13,227	11,204	15,680	16,046	17,069	20,661	19,465
Notes and accounts payable - trade	3,108	2,655	2,645	3,224	2,687	2,407	2,776	2,612	3,882	1,827
Short-term borrowings	3,328	3,825	1,788	1,525	1,753	2,675	1,754	2,375	3,199	2,361
Current portion of long-term borrowings	3,801	4,546	5,093	5,089	4,111	7,804	7,575	7,976	6,346	9,658
Lease obligations	-	-	70	68	70	149	570	180	196	254
Accounts payable - other	1,016	1,075	2,707	1,535	1,184	1,258	1,976	1,779	3,610	2,659
Income taxes payable	127	184	191	528	177	240	204	558	1,335	976
Provision for bonuses	263	476	471	461	453	239	210	400	724	800
Provision for bonuses for directors	-	-	-	15	-	-	-	-	15	-
Other	633	805	711	779	765	905	978	1,186	1,350	927
<b>Non-current liabilities</b>	8,667	10,896	16,380	16,354	17,230	12,183	16,768	17,788	20,425	20,974
Long-term borrowings	6,050	8,258	12,444	12,851	14,581	9,310	14,457	15,146	17,769	18,390
Lease obligations	-	-	712	640	570	718	162	459	330	173
Deferred tax liabilities	679	822	740	865	681	706	714	958	1,008	1,135
Retirement benefit liability	1,578	1,493	2,114	1,691	1,101	1,185	1,210	982	1,092	1,048
Long-term accounts payable - other	218	161	222	172	165	134	94	105	93	77
Other	141	159	146	132	129	128	129	137	130	148
<b>Total liabilities</b>	20,946	24,465	30,061	29,581	28,434	27,864	32,814	34,858	41,086	40,439
<b>Net assets</b>										
Shareholders' equity										
Share capital	19,344	19,344	19,344	19,344	19,344	19,344	19,344	19,344	19,344	19,344
Capital surplus	12,413	12,413	7,158	7,158	7,158	7,158	7,158	7,158	7,168	7,172
Retained earnings	1,356	-5,309	-19	687	66	-530	-334	686	4,131	6,500
Treasury shares	-1,532	-1,910	-1,914	-1,917	-1,920	-1,921	-1,924	-1,926	-1,928	-1,929
Total shareholders' equity	31,582	24,538	24,570	25,273	24,649	24,051	24,244	25,263	28,715	31,088
Accumulated other comprehensive income										
Valuation difference on available-for-sale securities	234	526	288	423	375	329	305	953	1,287	1,069
Deferred gains or losses on hedges	-	-	-	-	-	-	-46	-104	-	-
Foreign currency translation adjustment	232	1,891	1,053	831	751	845	434	1,155	2,551	3,318
Remeasurements of defined benefit plans	235	350	-178	-22	190	263	135	624	566	425
Total accumulated other comprehensive income	702	2,768	1,164	1,232	1,317	1,437	828	2,629	4,405	4,812
Non-controlling interests	4,360	5,148	4,631	4,730	4,913	5,077	5,107	5,876	7,109	7,281
<b>Total net assets</b>	36,646	32,455	30,366	31,237	30,880	30,566	30,180	33,769	40,231	43,182
<b>Total liabilities and net assets</b>	57,592	56,921	60,427	60,819	59,315	58,431	62,995	68,627	81,317	83,622

## Consolidated Statements of Income

Unit: Million yen

	'14.3	'15.3	'16.3	'17.3	'18.3	'19.3	'20.3	'21.3	'22.3	'23.3
<b>Net sales</b>	33,788	31,076	32,182	30,959	30,298	28,457	29,881	33,189	41,306	38,430
Cost of sales	26,736	26,752	25,287	23,450	23,570	22,276	23,443	24,867	29,081	26,788
Gross profit	7,052	4,324	6,894	7,508	6,728	6,181	6,438	8,321	12,224	11,642
Selling, general and administrative expenses	6,266	6,611	6,201	6,113	6,427	6,134	6,160	6,232	7,029	7,432
<b>Operating profit</b>	785	-2,286	693	1,395	300	47	277	2,089	5,194	4,210
Non-operating income	804	1,362	782	619	313	623	492	760	1,658	1,253
Interest income	26	32	37	46	64	63	53	30	43	76
Dividend income	28	30	43	36	33	38	42	50	56	78
Insurance claim income	-	-	65	79	67	256	56	54	76	80
Subsidy income	-	-	400	313	-	-	220	63	-	-
Foreign exchange gains	530	1,056	-	-	-	124	-	399	1,317	809
Other	219	242	235	143	148	140	119	161	163	209
Non-operating expenses	271	246	778	463	397	289	425	316	305	357
Interest expenses	213	126	164	132	128	127	121	114	131	209
Foreign exchange losses	-	-	536	255	127	-	215	-	-	-
Compensation expenses	-	-	-	-	-	88	-	104	45	-
Other	58	119	77	74	141	73	88	98	128	148
<b>Ordinary profit</b>	1,318	-1,170	697	1,551	216	381	344	2,533	6,547	5,106
Extraordinary income	6	2	18	237	312	5	599	101	14	60
Gain on sale of non-current assets	3	2	11	67	33	4	201	9	14	13
Gain on sale of investment securities	-	-	7	45	30	0	94	49	-	46
Gain on sale of businesses	-	-	-	-	-	-	302	-	-	-
Gain on liquidation of subsidiaries and associates	-	-	-	-	-	-	-	41	-	-
Gain on contribution of securities to retirement benefit trust	-	-	-	124	248	-	-	-	-	-
Other	2	-	-	-	-	-	-	-	-	-
Extraordinary losses	128	4,522	59	595	326	148	55	290	495	38
Loss on sale of non-current assets	7	37	35	7	13	11	0	0	0	0
Loss on retirement of non-current assets	43	222	4	19	1	6	2	0	201	0
Impairment losses	0	368	12	293	77	13	18	221	293	38
Restructuring costs	-	3,892	-	-	-	-	-	-	-	-
Loss on business transfer	-	-	-	-	-	116	33	40	-	-
Loss on valuation of investment securities	-	-	6	-	-	-	-	24	-	-
Loss on abandonment of inventories	-	-	-	218	-	-	-	-	-	-
Product compensation expenses	-	-	-	-	234	-	-	-	-	-
Other	76	2	-	57	-	-	-	3	0	-
<b>Profit before income taxes</b>	1,195	-5,690	656	1,193	203	238	888	2,343	6,066	5,127
Income taxes - current	192	260	278	542	189	302	258	566	1,408	1,431
Income taxes for prior periods	-	-	36	-	30	-	-	-	69	-
Income taxes - deferred	26	187	0	-213	67	84	75	94	-314	145
Profit attributable to non-controlling interests	167	207	202	172	214	327	278	459	1,054	341
<b>Profit attributable to owners of parent</b>	810	-6,346	139	691	-298	-475	276	1,223	3,848	3,208

## Consolidated statement of comprehensive income

Unit: Million yen

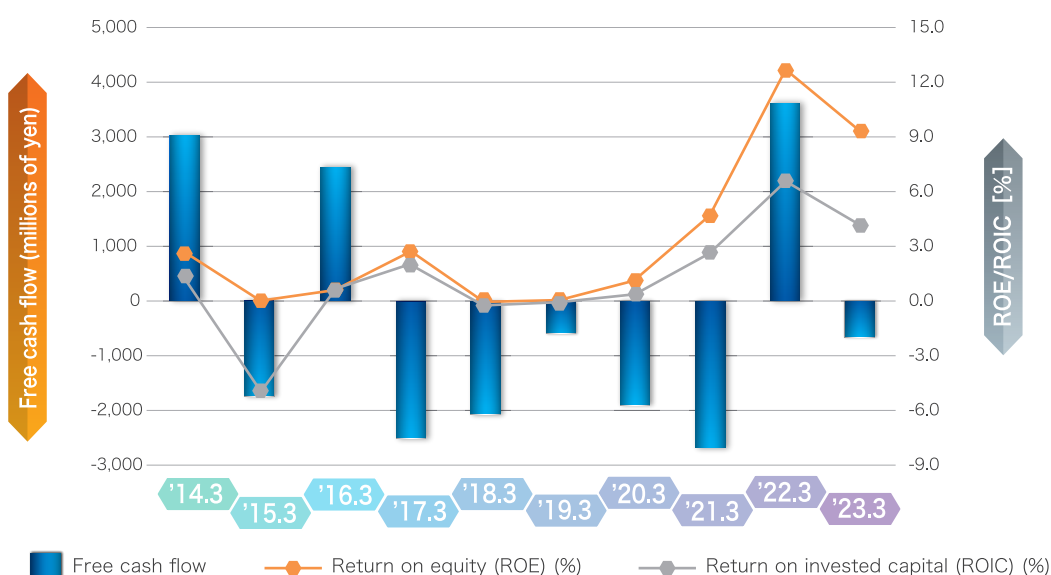
	'14.3	'15.3	'16.3	'17.3	'18.3	'19.3	'20.3	'21.3	'22.3	'23.3
Profit	977	-6,139	341	864	-84	-148	554	1,682	4,903	3,550
Total other comprehensive income	1,375	2,740	-2,151	119	180	150	-648	2,609	2,634	471
Valuation difference on available-for-sale securities	144	292	-238	135	-15	-2	115	1,067	656	-451
Deferred gains or losses on hedges	-	-	-	-	-	-	-46	-58	104	-
Foreign currency translation adjustment	1,231	2,332	-1,372	-168	-20	75	-580	1,111	1,931	1,045
Remeasurements of defined benefit plans	-	115	-540	152	216	78	-137	489	-57	-122
<b>Comprehensive income</b>	2,353	-3,398	-1,809	983	95	1	-94	4,292	7,537	4,021
Total comprehensive income attributable to:										
Shareholders of DAISHINKU Corporation	1,932	-4,280	-1,464	768	-213	-355	-332	3,023	5,624	3,615
Comprehensive income attributable to non-controlling interests	420	882	-345	215	309	357	238	1,268	1,912	406

# 10-year Financial Data

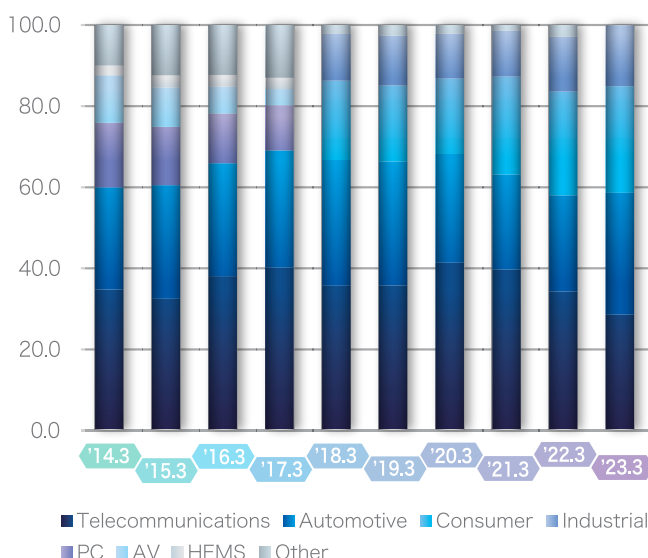
Consolidated statements of cash flows and other information

Unit: Million yen

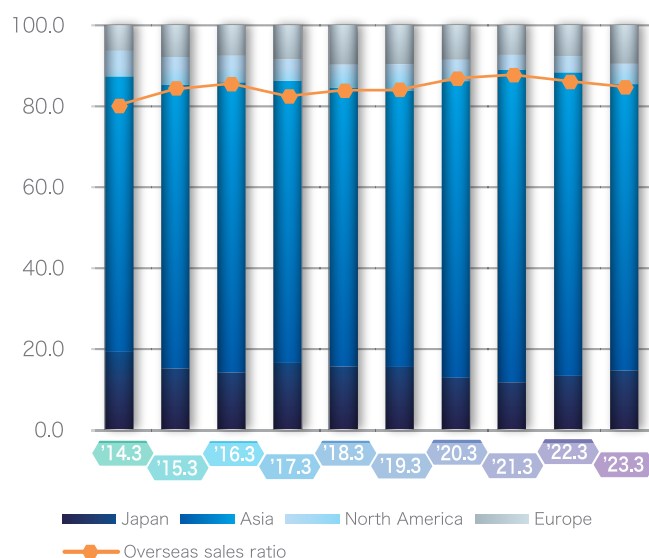
	'14.3	'15.3	'16.3	'17.3	'18.3	'19.3	'20.3	'21.3	'22.3	'23.3
Net cash provided by (used in) operating activities	5,458	1,931	4,847	2,584	849	998	688	2,707	8,762	5,859
Net cash provided by (used in) investing activities	-2,434	-3,664	-2,418	-5,070	-2,925	-1,590	-2,592	-5,388	-5,176	-6,524
Net cash provided by (used in) financing activities	-4,497	2,098	3,433	-318	501	-1,054	3,586	870	382	1,298
Free cash flow	3,024	-1,733	2,429	-2,486	-2,076	-592	-1,904	-2,681	3,586	-665
Capital expenditures	2,625	3,507	3,349	3,624	2,888	2,484	4,047	4,355	7,116	5,913
Depreciation	3,513	3,648	2,459	2,584	2,860	2,801	2,582	2,921	3,494	3,993
R&D expenses	1,912	2,080	1,818	1,739	1,825	1,716	1,907	2,048	2,171	2,205
R&D expenses to net sales (%)	5.7	6.7	5.6	5.6	6.0	6.0	6.4	6.2	5.3	5.7
Net income per share	24.44	-194.30	4.33	21.41	-9.23	-14.74	8.56	37.90	119.21	99.41
Shareholders' equity per share	974.23	844.76	796.41	820.57	804.03	789.34	776.61	864.05	1,026.09	1,112.24
Dividends per share	11.30	2.50	2.50	7.50	5.00	3.80	5.00	8.75	18.25	28.00
Dividend payout ratio (%)	46.0	-	57.8	35.0	-	-	58.4	23.1	15.3	28.2
Gross profit to net sales (%)	20.9	13.9	21.4	24.3	22.2	21.7	21.5	25.1	29.6	30.3
Operating income to net sales (%)	2.3	-	2.2	4.5	1.0	0.2	0.9	6.3	12.6	11.0
Return on total assets (operating income) (ROA) (%)	1.3	-	1.2	2.3	0.5	0.1	0.5	3.2	6.9	5.1
Return on equity (ROE) (%)	2.6	-	0.5	2.7	-	-	1.1	4.6	12.6	9.3
Return on invested capital (ROIC) (%)	1.3	-5.0	0.7	2.0	-0.2	-0.1	0.3	2.6	6.6	4.1



Percentage of sales by application



Sales composition by geographical area



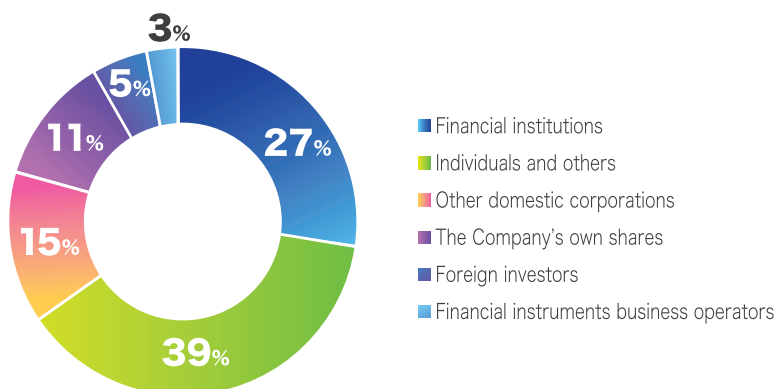


# Stock-related Information

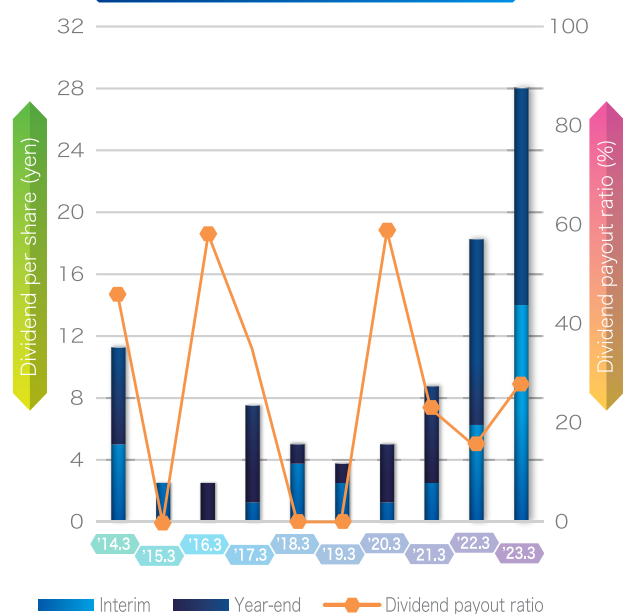
Date of foundation	November 3, 1959
Date of incorporation	May 8, 1963
Trade name	DAISHINKU CORP.
Head office	1389 Shinzaike, Hiraoka-cho, Kakogawa, Hyogo, Japan
Share capital	19,344 million yen
Consolidated number of employees	3,350

Fiscal year-end	March 31
Stock exchange listing	Tokyo Stock Exchange Prime Market
Number of shares authorized	104,000,000 shares
Number of shares issued	36,196,968 shares
Trading unit	100 shares
Number of shareholders	14,250

## Shareholder Composition

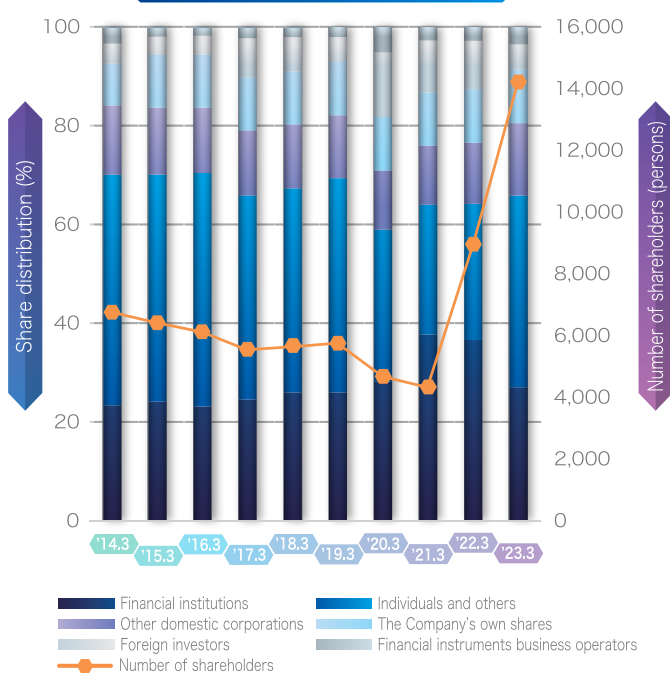


## Changes in shareholder returns and dividend payout ratio



\* This graph was recalculated using the number of shares issued as of March 31, 2023.

## Changes in share distribution



	'14.3	'15.3	'16.3	'17.3	'18.3	'19.3	'20.3	'21.3	'22.3	'23.3
Interim	4(5)	2(2.5)	0	1(1.25)	15(3.25)	10(2.5)	5(1.25)	10(2.5)	25(6.25)	14
Year-end	5(6.25)	0	2(2.5)	25(6.25)	5(1.25)	5(1.25)	15(3.25)	25(6.25)	12	14
Dividend payout ratio	46.0	-	57.8	35.0	-	-	58.4	23.1	15.3	28.2

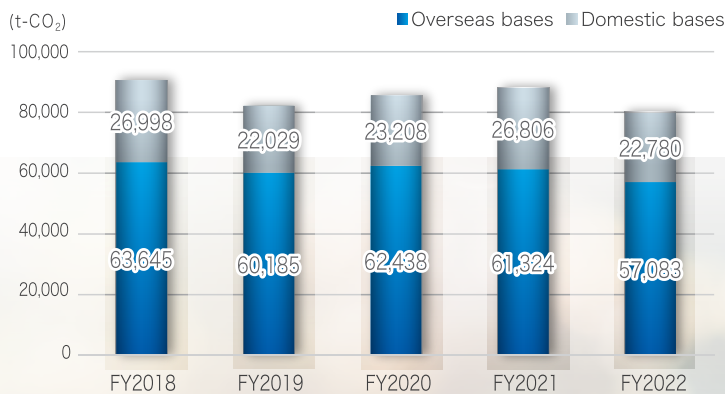
\* The Company implemented a 1-for-5 reverse stock split on its common shares on October 1, 2016 and subsequently executed a 4-for-1 stock split on its common shares on November 1, 2021. The values in parentheses were recalculated using the number of shares issued as of March 31, 2022.

\* The dividend payout ratio is not provided for fiscal years in which net loss was reported.

# Key Environmental Data

Reduction of GHG emissions		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Total GHG emissions (Scopes 1, 2 and 3 emissions)		t-CO <sub>2</sub> e	194,588	198,780	217,359	225,429	211,837
GHG emissions (Scopes 1 and 2 emissions)			90,643	82,214	85,646	88,129	79,863
Scope 1	Japan		3,134	3,047	3,051	3,397	4,049
	Overseas		2,579	2,612	2,564	2,886	3,568
Scope 2	Japan		555	435	487	511	481
	Overseas		87,510	79,167	82,595	84,732	75,814
GHG emissions (Scope 3 emissions)			24,419	19,417	20,644	23,920	19,213
Scope 3	Purchased goods and services		63,091	59,750	61,951	60,813	56,602
	Capital goods		103,944	116,566	131,714	137,300	131,973
	Fuel- and energy-related activities		84,205	94,797	106,235	110,176	105,226
	Upstream transportation and distribution		5,777	8,649	12,120	13,943	14,289
	Waste generated in operations		9,706	9,491	9,787	9,861	9,115
	Business travel		602	473	422	382	381
	Employee commuting		1,037	668	621	528	606
	Upstream leased assets		574	565	557	547	505
	Downstream transportation and distribution		2,039	1,921	1,967	1,859	1,848
	Processing of sold products		(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
	Use of sold products		(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
	End-of-life treatment of sold products		(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
	Downstream leased assets		3	3	4	4	3
	Franchises	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	
Investments	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)		
Energy consumption		GJ	543,738	522,639	539,237	546,762	533,511
Purchased and consumed non-renewable fuels (fossil fuels, coal, oil, natural gas, etc.)		MWh	49,078	47,059	47,672	52,686	60,308
Purchased electricity (non-renewable)			134,906	132,106	136,309	136,693	124,630
Purchased steam, heating, cooling and other non-renewable energy			(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
Purchased or generated renewable energy (wind power, solar power, biomass, hydropower, geothermal energy, etc.)			(N/A)	(N/A)	237	551	6,816
Total sold non-renewable energy (electricity, heating and cooling)			(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Volume of greenhouse gas emissions (Scopes 1 and 2)



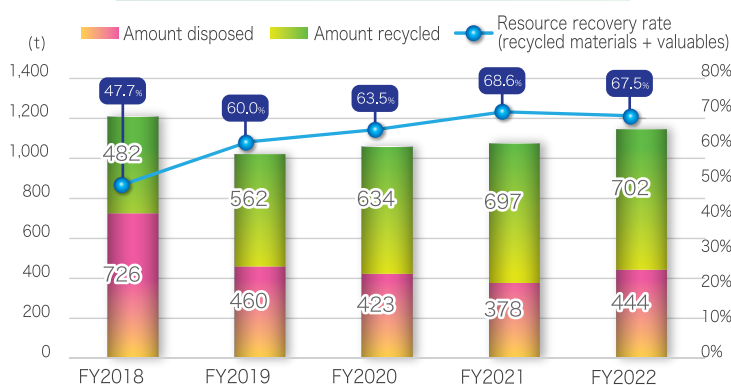
The Group establishes and manages reduction targets for Scopes 1 and 2 emissions that represent sources of CO<sub>2</sub> emissions stemming from its manufacturing activities.

Since FY2022, we have shifted a portion of our electricity consumption in Japan to renewable energy sources, resulting in an annual reduction of approximately 3,000 tons of CO<sub>2</sub> emissions.

Going forward, we will strive to reduce CO<sub>2</sub> emissions through further adoption of renewable energy and technological innovations.

Waste reduction		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Recycling rate	Japan	%	55	72	80	80	73
	Overseas		29	36	37	44	43
Total waste discharged	Japan	Ton	502	538	555	633	700
	Overseas		707	484	502	442	446
Waste recycled	Japan	Ton	275	390	447	504	509
	Overseas		207	172	187	193	193
Final waste disposal	Japan	Ton	227	148	109	129	191
	Overseas		500	312	315	249	253

### Waste generated and resource recovery rate



The Group is fully dedicated to waste separation initiatives.

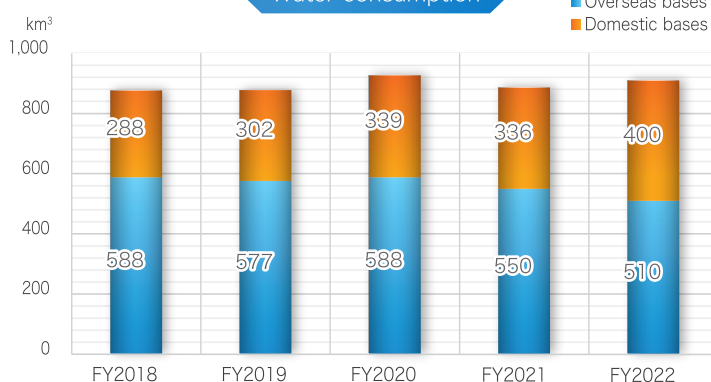
– Effect of reduced environmental impact through waste separation –

- Recycling waste (resource reutilization) can be maximized. It helps minimize the amount of waste disposal (landfill disposal)
- Transforming waste into valuable resources\* reduces waste generation.

\* Separating valuable resources from waste to sell them as valuables  
 \* The resource reutilization rate is the recycling rate plus the contribution of valuable resources.

Water consumption		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Water withdrawn	Municipal water supplies (or from other water utilities)	km <sup>3</sup>	876	878	927	886	909
	Surface water (rivers)		503	491	513	464	446
	Groundwater		150	153	175	168	168
	Reclaimed water/Recycled water		223	234	232	231	279
			-	-	7	23	16
Water discharged		km <sup>3</sup>	741	727	765	730	716
	Surface water (rivers, etc.)		209	221	219	221	251
	Other treatment plant (sewers, etc.)		532	507	547	509	466

### Water consumption



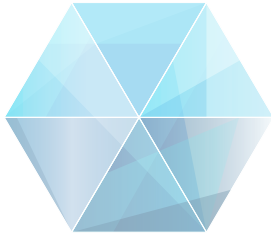
In September 2020, we introduced a wastewater recycling system at our plant in Thailand as part of our initiatives to reduce water consumption. As a result, water consumption at the plant declined by approximately 21% in fiscal 2021 compared to fiscal 2018, and water discharge reduced by approximately 43%.

While water consumption rose in FY2022 due to increased production, we remain committed to enhancing our production processes to minimize the environmental impact of our business activities.

\* Some figures in the graph may differ from those in the table because they have been rounded to the nearest km<sup>3</sup>.

ISO 14001 certification achievement		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
ISO 14001 certification achieved (for Head Office and production bases)	Organization	ISO 14001-certified organizations Japan: 100%; Overseas: 100%					
Violations of environmental regulations and obligations in general, including air and water pollution		Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Number of violations (Fines ≥US\$10,000)	Case	0	0	0	0	0	
Amount of fines (≥US\$10,000)	US\$	0	0	0	0	0	





**DAISHINKU CORP.**

<https://www.kds.info>