



# Integrated Report

2021.7.1-2022.6.30



# A Construction Company that doesn't Construct

## We create the future of social infrastructures

The SHO-BOND Group is a comprehensive maintenance company that specializes in repairing and reinforcing social infrastructures.

SHO-BOND combines innovative chemical and civil engineering technologies to create new materials and construction methods that reflect the current requirements of the times.

SHO-BOND has been a leading company in the structure maintenance business for many years.

Repair and reinforcement work is urgently needed in many places because of the increasing age of infrastructure in Japan and other countries.

Dedicated to the mission of "Inheriting and passing on social infrastructure to the next generation in good condition," SHO-BOND meets the needs of society by using its diverse and powerful resources to provide comprehensive infrastructure maintenance.

This is the mission of the SHO-BOND Group.

### KEY FIGURES

(As of June 30, 2022)



Operating Profit  
**17.26** ¥bn



Operating Profit Margin  
**21.3** %



ROE  
**13.4** %



PBR

3.38 times



Equity Ratio

80.2 %



Total Return Ratio

75.1 %



Number of Employees

951



Group Companies

18



**Preserving bridges in your memory**

**Focused on today's infrastructure,  
looking ahead to the future**



**Constantly repairing and passing infrastructure  
on to the next generation**



**Experience and Technologies**  
– Our contributions to safety and  
quality in society –

#### Note regarding English translation

The content of this report is composed in Japanese. The Company provides the English version for your reference and convenience only without any warranty as to its accuracy. In case of any discrepancy between the English version and the Japanese original, the latter shall prevail.

#### Editorial policy

This is the first Integrated Report produced by SHO-BOND. We decided to begin issuing this report with the fiscal year that ended in June 2022 for the purpose of explaining to stakeholders the value that our business operations create and our commitment to sustained growth.

This publication is based on the International <IR> Framework of the International Integrated Reporting Council and the Guidance for Collaborative Value Creation of the Ministry of Economy, Trade and Industry. For more information about SHO-BOND, including news releases and other recent announcements, please visit our website.

#### Period covered by this publication

FY2022 (July 1, 2021 to June 30, 2022)

This report uses the latest information that was available at the date of publication.

#### Organization covered by this publication

SHO-BOND Holdings and its consolidated subsidiaries and affiliates

#### Date of issue

December 2022

#### Note regarding forward-looking statements

Plans, forecasts, strategies and other forward-looking statements in this report are based on information that is currently available and on judgments believed to be reasonable in accordance with certain assumptions. Actual results of operations may differ from these forward-looking statements due to numerous risk factors and uncertainties.

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### Corporate Governance

### Company Information

# Inheriting and passing on social infrastructure to the next generation in good condition

We play an important role in the sustainability of cities by utilizing technologies acquired during more than 60 years in the infrastructure maintenance business for repairing and reinforcing a broad range of structures that are vital parts of the social infrastructure.



## ■ Harbor Quay

- Protection from salt damage
- Prevention of concrete degradation



## ■ Railways

- Repair of damage at elevated railways
- Seismic retrofitting



## ■ Irrigation Channels

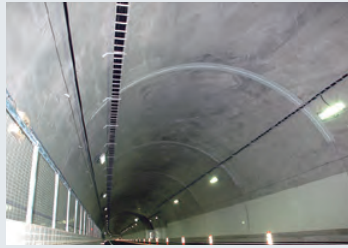
- Prevention of cracking
- Prevention of water leaks





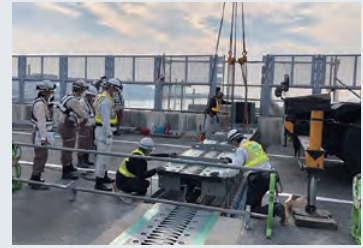
- Seismic retrofitting
- Prevention of concrete degradation

■ Bridges



- Prevention of ceiling and wall peeling
- Stop groundwater leaks

■ Tunnels



- Repair of expansion joints
- Noise reduction

■ Road structures



■ Water Supply and Sewer Systems

- Protection from corrosion



■ Buildings

- Seismic retrofitting



■ Silo

- Repair of wall surface degradation



## History of SHO-BOND

# The Origin of “SHO-BOND”



Akira Ueda when Showa Kogyo was established

Showa Kogyo Corporation was established in Setagaya-ku, Tokyo on June 4, 1958 by Akira Ueda, who was 31 years old.

Initially, the main business was construction involving rigid PVC pipes. In 1959, Showa Kogyo quickly repaired cracks at the spillway of the Yakuwa Dam by using PVC boards and epoxy resin. This accomplishment led to the development in September 1959 of a high-strength epoxy resin adhesive (currently equivalent to #101 adhesive). This was followed by the development of adhesives for specific applications that used the registered trademark “SHO-BOND”. Production of these adhesives started in November 1959.

In 1960, the head office moved to Chiyoda-ku, Tokyo and the sale of “SHO-BOND” and construction processes using this material started. To sell this product for civil engineering applications, whole numbers were used for the ratios of base agents and hardeners for all versions of SHO-BOND. Synthetic resin adhesives were soon widely used at construction sites in Japan.



(left) The manufacture of “SHO-BOND” adhesives

(right) A SHO-BOND adhesive test at the Institute of Industrial Science, the University of Tokyo

## The corporate DNA as a company specializing in infrastructure maintenance

In 1989, 31 years after its establishment, the stock listing was moved to the first section of the Tokyo Stock Exchange. This was the peak of Japan’s bubble economy as many companies were diversifying operations. At the Company-wide Sales Meeting, company president Akira Ueda declared that the company would focus exclusively on repair and reinforcement projects.

We, SHO-BOND have dedicated ourselves to the comprehensive maintenance of concrete structures and this commitment will not change. We will steadily establish a sound foundation for business operations in this field. We do not deviate from the mission, do not branch out into other businesses in response to short-term trends, and concentrate on serving society.

The corporate DNA as an infrastructure maintenance specialist, based on growth prospects backed by the aging of Japan’s highway infrastructure, still defines the SHO-BOND Group today.



Akira Ueda at SHO-BOND’s 30th anniversary



## History of SHO-BOND

# 1958-

[The special website for SHO-BOND's 60th anniversary \(Japanese version only\)](https://www.sho-bond.co.jp/60th/)  
<https://www.sho-bond.co.jp/60th/>

**June 4, 1958** Started operations as Showa Kogyo Corporation.

**1963** The company was renamed SHO-BOND Co., Ltd. and the development of new products and construction methods started for the use of high-polymer materials at civil engineering and construction projects.

**1964** SHO-BOND participated in the repair of cracks in the deck slab of the Showa Ohashi Bridge in Niigata, which collapsed during an earthquake shortly after the bridge was completed.

**1964** Tokyo Olympics

**1965** After a trial installation of the Cut-off Joint, an expansion device for highway bridge developed by SHO-BOND and Japan Highway Public Corporation, this innovation was used nationwide at expressway construction projects.

**1965** Completion of the Meishin Expressway

**1975** SHO-BOND split into two companies: SHO-BOND CORPORATION and SHO-BOND Chemical

**1977** Relocated the Central Technical Research Institute to Omiya (now the city of Saitama) and started strengthening R&D capabilities to reinforce SHO-BOND's reputation as a technology-oriented organization. The institute develops new products and construction methods that combine chemical and civil engineering technologies.



1961 Founder Akira Ueda transports building materials to a dam construction site during a blizzard

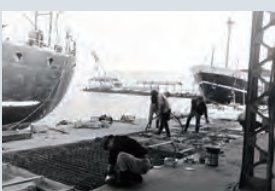


1977 The Central Technical Research Institute in 1977



1981 The SHO-BOND BICS (Balloon Injection for Concrete Structures) Method for repairing cracks in concrete was used at the Japan-U.S. large earthquake resistance experiment at the Building Research Institute of the Ministry of Construction.

## History of New Products and Construction Methods



1962 Concrete successive pour method using SHO-BOND #202 adhesive



1967 Installation of the Cut-off Joint at the Tomei Expressway Nagoya Interchange



1968 Developed and started sales of SHO-BOND Mini



1983 Developed the DD BICS Method

# 1982-

**1982** Established an agreement with Straub, based on Switzerland, to manufacture Straub couplings in Japan.

**1987** SHO-BOND was listed on the second section of the Tokyo Stock Exchange and moved to the first section in 1989 as progress continued as a provider of comprehensive maintenance services for concrete structures.

**1989** Nikkei Stock Average reached an all-time high of ¥38,915

**1995** Many elevated sections of the Hanshin Expressway collapsed during the 1995 Great Hanshin-Awaji Earthquake, but sections supported by columns with seismic reinforcement using SHO-BOND's steel plate jacketing method were not damaged. After this disaster, seismic reinforcement projects increased throughout Japan and SHO-BOND's sales and earnings increased significantly.

**1995** The Great Hanshin-Awaji Earthquake

**1996** The Technical Research Institute began operating. The development of new technologies and equipment at the institute for assessing durability and other properties have helped make SHO-BOND's construction methods and products even more reliable.

**2005** Enactment of the Act on Promoting Quality Assurance in Public Works resulted in the use of a new evaluation method for the selection of winning bids by taking into account various considerations other than price. This gave SHO-BOND a big advantage due to the company's reliable technologies and long record of proven reliability at public-works projects.



1982 Signing the coupling manufacturing agreement with Straub



1991 Exterior work at the bridge over Nihonbashi



1995 A section of the Hanshin Expressway destroyed by the Great Hanshin-Awaji Earthquake



1995 Expressway columns reinforced shortly before the earthquake were intact



1996 The new Technical Research Institute

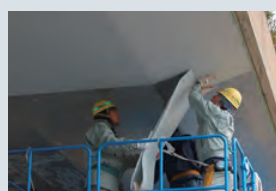
## History of New Products and Construction Methods



1983 ST Joint



1997 Restraining Chain



2006 RAC-Sheet Method (prevents concrete degradation)



2006 Restraining Belt

# 2008-

**2008** Established SHO-BOND Holdings Co., Ltd.

**2011** The Great East Japan Earthquake of 2011 showed the effectiveness of seismic reinforcement work that was done after the Great Hanshin-Awaji Earthquake. This disaster further increased the pace of work to make Japan's infrastructure more resistant to earthquakes. SHO-BOND established 12 regional construction subsidiaries (the Kako Group) as a framework for receiving orders from local governments.

<b>2011</b>	The Great East Japan Earthquake
<b>2012</b>	Sasago Tunnel ceiling collapse on the Chuo Expressway
<b>2013</b>	Amendment to the Road Traffic Act, and compilation of the Basic Plan for Life Extension of Infrastructure (the First Year of Social Infrastructures Maintenance)
<b>2015</b>	Beginning of the large-scale renewal and repair projects of expressway companies
<b>2016</b>	Kumamoto Earthquake

**2017** Passing of Akira Ueda, founder and chairman.

<b>2018</b>	Reexamination of the Japanese government's Fundamental Plan for National Resilience
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**2019** SHO-BOND and MITSUI & CO., LTD. established SHO-BOND & MIT Infrastructure Maintenance Corp. (SB&M) to operate an infrastructure maintenance business outside Japan.

**2020** SB&M and CPAC, a member of the Siam Cement Group of Thailand, established CPAC SB&M Lifetime Solution Co., Ltd. in Thailand.

**2021** Opened the Tsukuba Training Center, which is adjacent to the Technical Research Institute.



2011 SHO-BOND's work at the Kobe Ohashi Bridge received a Technology Award from the Japan Society of Civil Engineers Kansai Branch



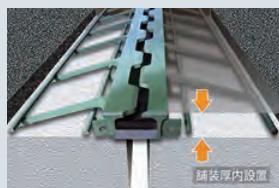
2011 Repairing Tohoku Shinkansen columns damaged by the Great East Japan Earthquake



2020 A trial construction project in Thailand



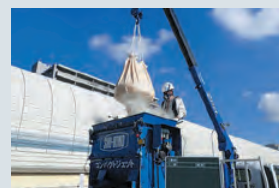
2008 Shearing Stopper



2011 AI Joint



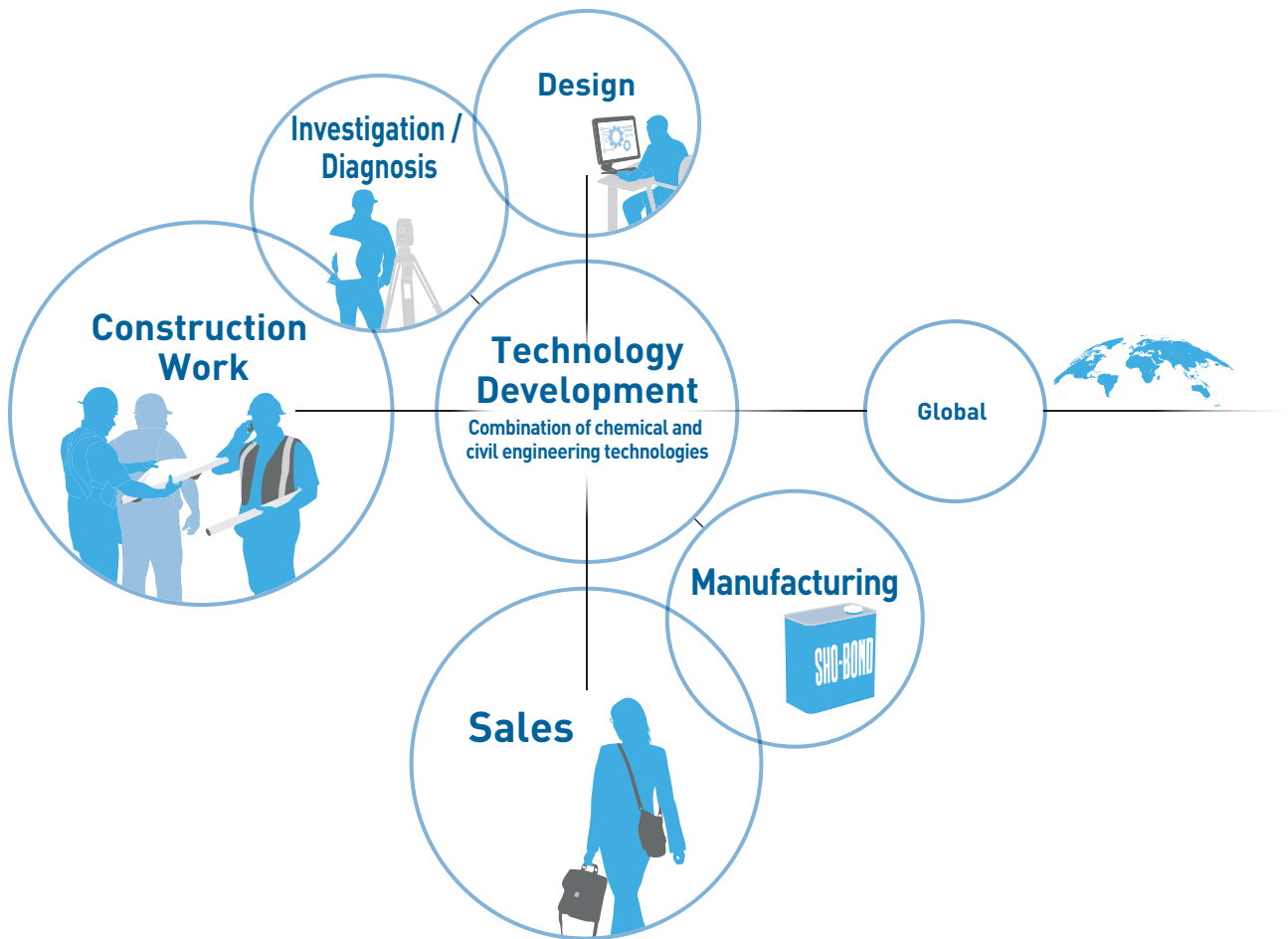
2017 Clear Protect Method



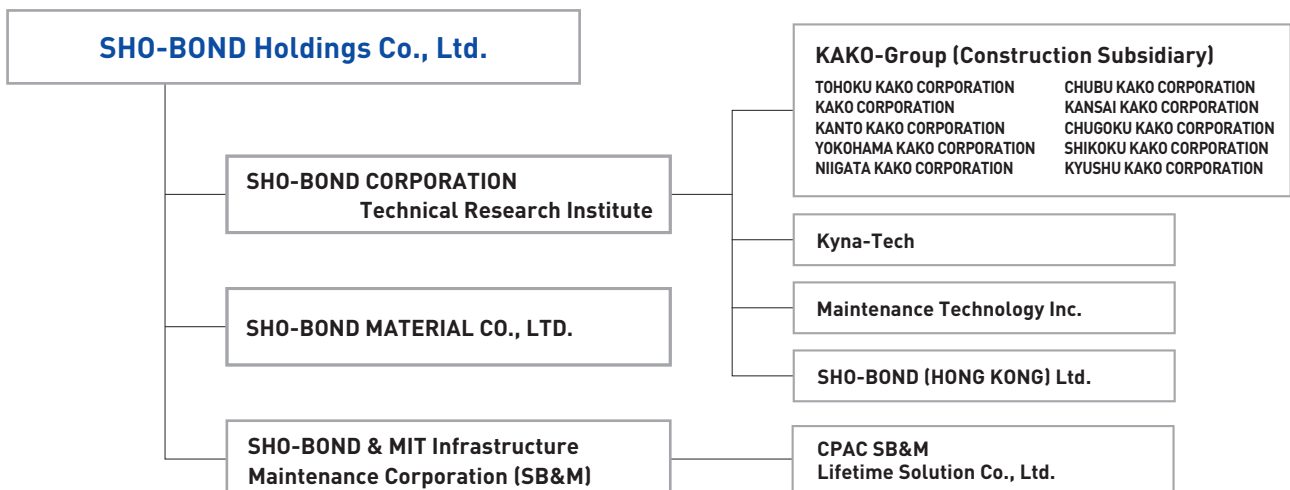
2020 CPU-L

# Comprehensive Maintenance System

The SHO-BOND Group is a comprehensive maintenance company which specializes in repairing and reinforcing social infrastructures. We provide extensive support in social infrastructure maintenance, with a focus on design and construction services as a construction company, together with services ranging from R&D of materials and construction methods, to manufacturing and sales of developed materials and construction methods. The country's foremost and comprehensive maintenance system. This is SHO-BOND's characteristic, our strength.



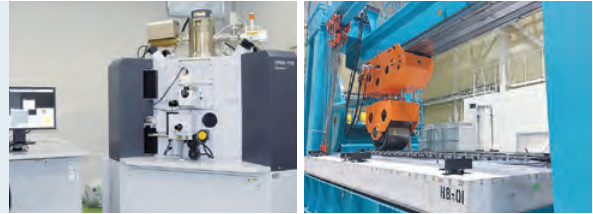
## Group Companies



## ○ Technology Development Development of new construction methods and materials required by the times

We have a wide array of state-of-the-art research equipment specialized in repair and reinforcement. Our researchers specializing in chemistry and civil engineering work together with external research institutes to develop new construction methods and materials that meet the needs of the coming age.

**Technical Research Institute (SHO-BOND CORPORATION)**



## ○ Investigation / Diagnosis / Design Exact proposals based on accurate investigation

We propose optimal design and construction methods by investigating and diagnosing, combining abundant knowledge and state-of-the-art technology in response to various structural damage problems.

**Maintenance Technology Inc.**



## ○ Construction Work Construction system that can handle all types of construction

SHO-BOND CORPORATION handles large-scale, high-difficulty construction works, while construction subsidiaries (the KAKO-Group), which have their head offices in various locations, handle small and medium-scale construction works. We undertake maintenance works nationwide, regardless of scale or whether we are a main contract or a subcontractor.

**SHO-BOND CORPORATION / KAKO-Group / Kyna-Tech**



## ○ Manufacturing Production system utilizing our factories and contract manufacturing

While manufacturing resin-based materials, which are our roots, in our factories, we develop and design structural construction materials in the Technical Research Institute and contract manufacturing to partner companies (fables). We have an efficient and asset-light production system.

**SHO-BOND MATERIAL CO., LTD.**



## ○ Sales Sales of a wide variety of repair and reinforcement products

Product sales and construction work are the two pillars of our businesses. With a lineup of organic, inorganic, and structural materials, our group companies approach a wide range of customers to expand our sales channels.

**Group companies**



## ○ Global Bringing Japanese maintenance technology overseas

We take on the challenge of solving the social issue of aging infrastructure faced by many countries by combining our technological expertise in infrastructure maintenance with the network and business development capabilities of MITSUI & CO., LTD.

**SB&M**



Corporate Philosophy

With a sense of mission of “Inheriting and passing on social infrastructure to the next generation in good condition,” we will contribute to the realization of a safe and affluent society by utilizing our advanced technological development capability as a leading company in the structure maintenance business.

### Social Issues

Accelerated aging of infrastructure

Increasingly severe and frequent natural disasters

Realization of a decarbonized society

Declining birthrate, aging population, and decreasing workforce

Heightened geopolitical risks and changes in economic conditions in Japan and overseas

### Inputs

#### Financial capital

- Sound financial base with high profitability

#### Manufactured capital

- The Group's strength for comprehensive infrastructure maintenance
- Construction methods and materials specialized in repair and reinforcement

#### Intellectual capital

- Accumulated technological development capabilities and knowledge centered on Technical Research Institute

#### Human capital

- Experienced and highly skilled engineers
- Multi-skilled workers with strengths as maintenance specialists

#### Social and relationship capital

- Engagement with stakeholders
- Strong network with partner companies

#### Natural capital

- Maintenance work with reduced environmental impact

### Business Model

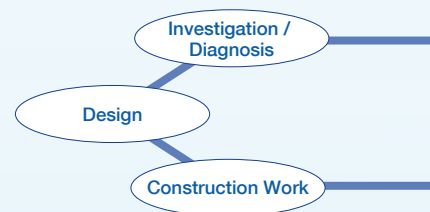
#### Our Vision

Fulfill our mission as a company

#### Be a technology-oriented organization

that combines chemical and civil engineering technologies to create new materials and construction methods

#### Comprehensive Maintenance



#### “Honing our inherent strengths what

Product sales

Construction work

Technological development

#### Materiality

Comprehensive maintenance system backed by the organizational capabilities



Productivity improvement through technology development



Contribution to society

Internal

specializing in maintenance

Place priority on profitability and efficiency

Technology Development

Manufacturing & Sales

Global

it is that makes us SHO-BOND”

Shareholder returns

Profitability

Financial soundness

Sound governance and measures for more improvements



Contribution to the development of sustainable cities



activities

Contribution to society

## Outcomes

### Resolution of social issues

- Measures against aging through preventive infrastructure maintenance
- Establishment of a safe and secure national, regional, and economic society with resilience
- Creation of sustainable and livable cities
- Curbing of greenhouse gas emissions (Reduction of environmental impact)

### Improvement of economic value

- Sales ..... ¥87.5 billion
- Profit attributable to owners of parent ..... ¥12.0 billion
- ROE ..... 12%
- Total return ratio ..... 75%

Medium-term Business Plan (FY2022 - FY2024)

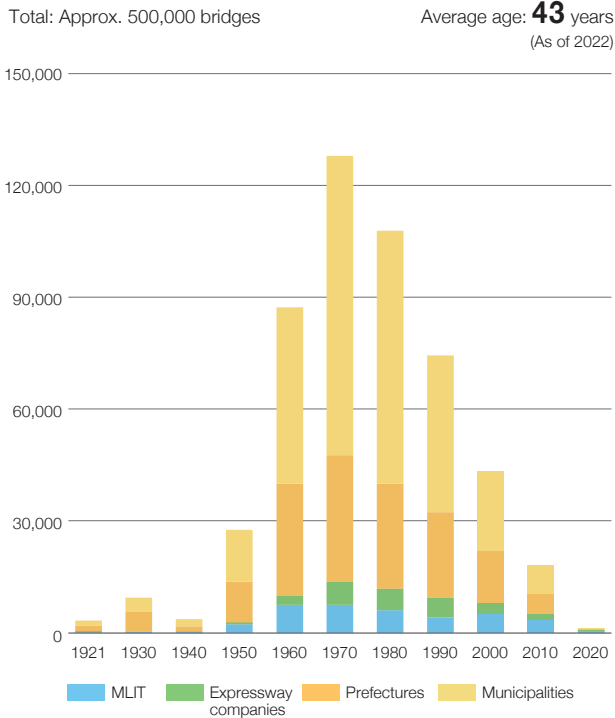
## Mission

Inheriting and passing on social infrastructure to the next generation in good condition

# Accelerated Aging of Infrastructure

Most of the infrastructure in Japan was built after the high economic growth period, and its aging is expected to accelerate in the future. In response to these social issues, national and local governments are taking action nationwide to formulate plans for appropriately maintaining, managing, and renewing infrastructure and extending the service life.

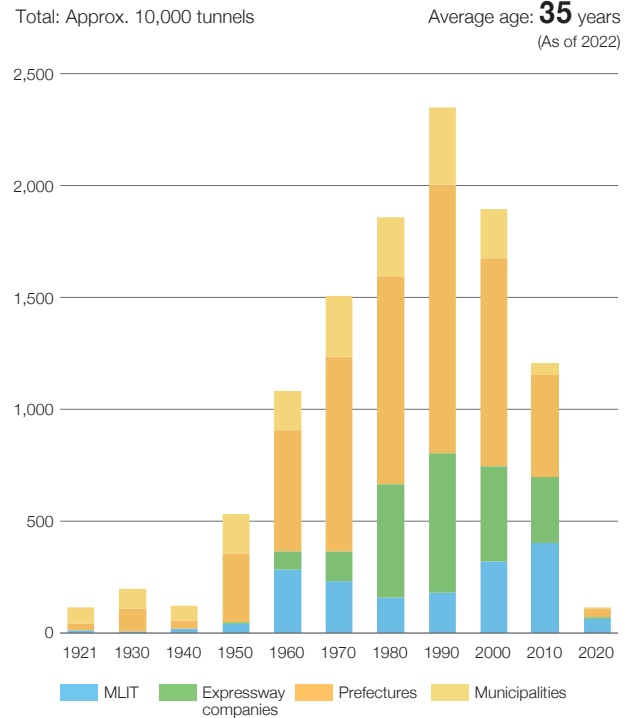
**Number of Bridges by Year of Construction**



Notes:

- Prepared by SHO-BOND based on MLIT data
- Number of managed facilities by road administrator
- In addition to the above, there are approximately 230,000 bridges and 400 tunnels whose construction year is unknown.

**Number of Tunnels by Year of Construction**



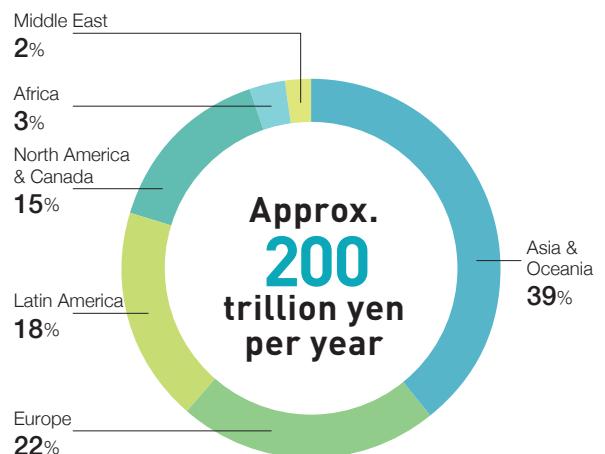
## Estimated Costs of Domestic Infrastructure Maintenance and Renewal

MLIT	194.6 trillion yen
Railway companies	38.4 trillion yen
MAFF	29.3 trillion yen
Expressway companies	19.4 trillion yen

2018-2048 **282** trillion yen

Note: Based on FY2019 and FY2020 estimates. The maximum amount of infrastructure maintenance/renewal expenses during the next 30 years is estimated based on the preventive maintenance concepts of various organizations. These expenses for MLIT are about 50% higher after 30 years when this estimate is based on the corrective maintenance concepts. (Source: National government materials, newspaper articles and other sources)

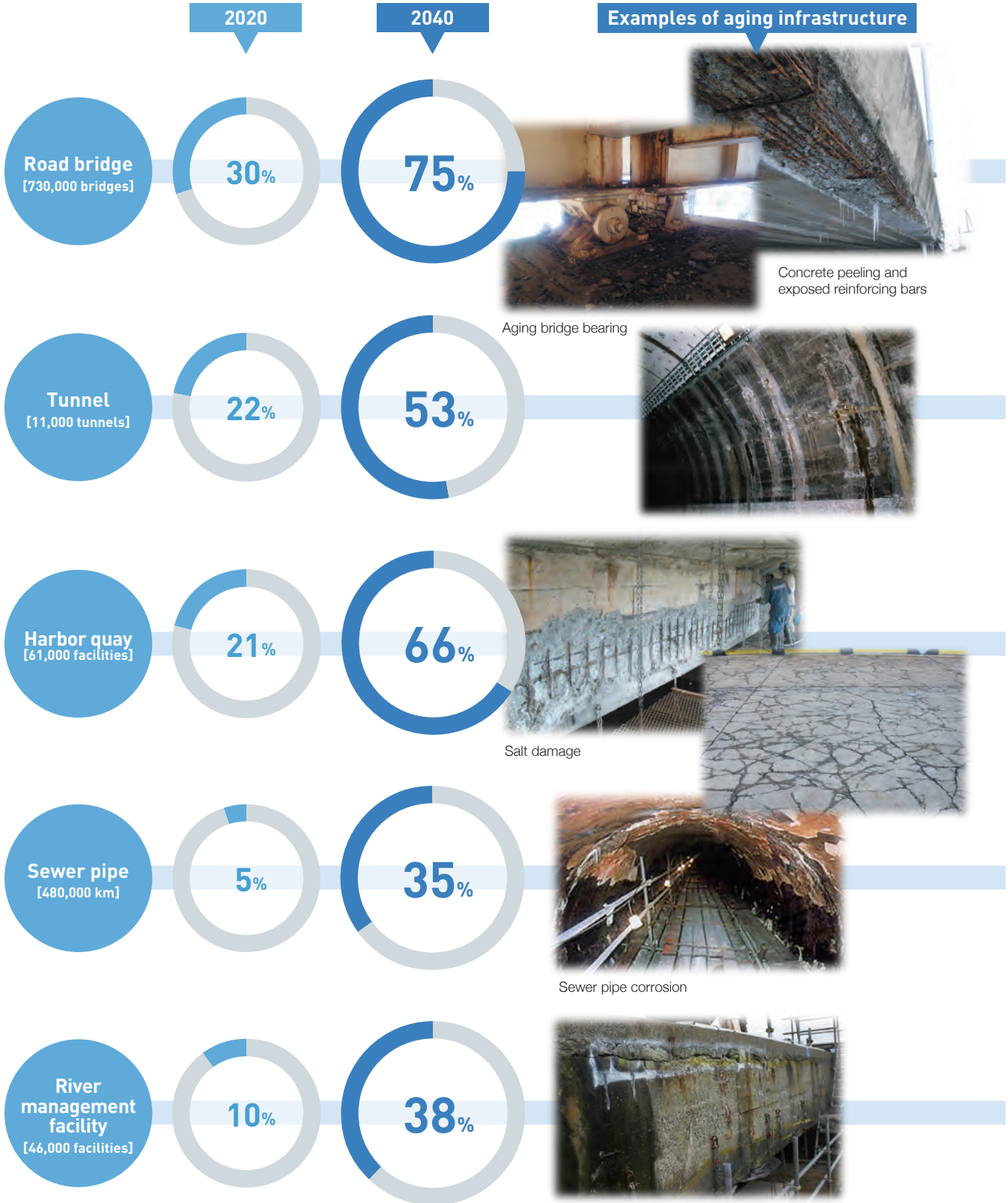
## Estimated Market Size of Overseas Infrastructure Maintenance



Source: Prepared by SHO-BOND based on MLIT data



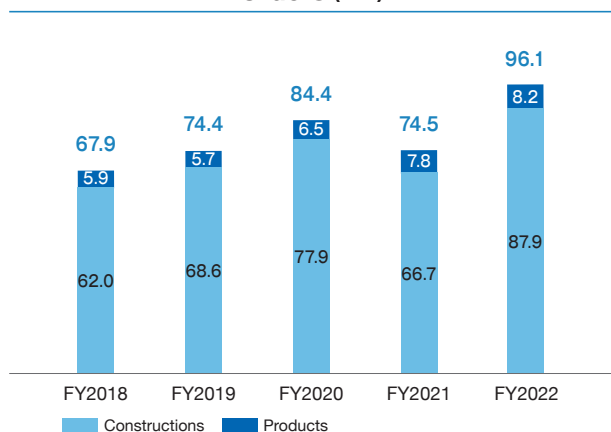
## Percentage of Structural Infrastructures Built More Than 50 Years Ago



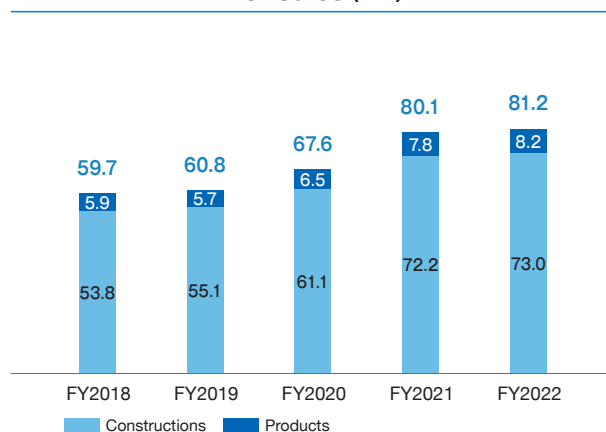
# Financial and Non-financial Highlights

## Financial

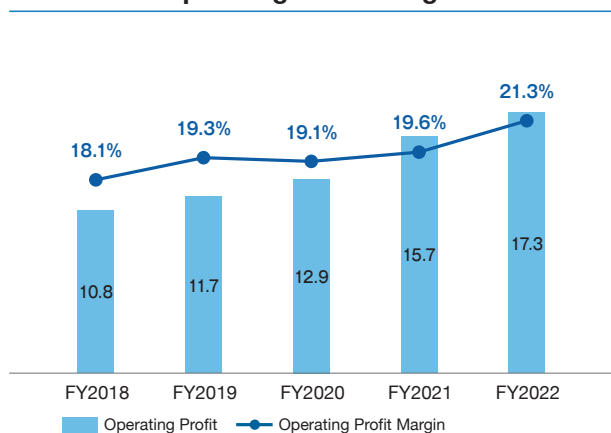
### Orders (¥bn)



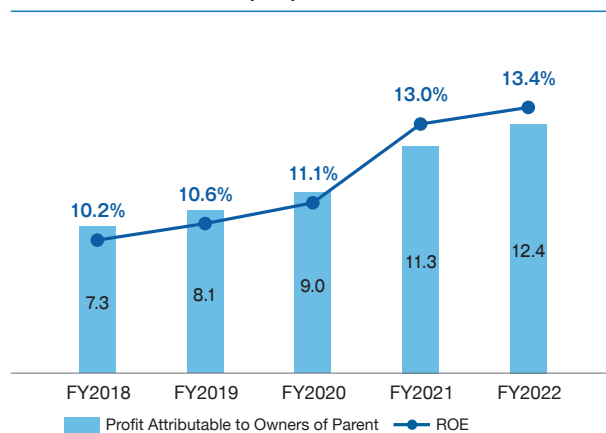
### Net Sales (¥bn)



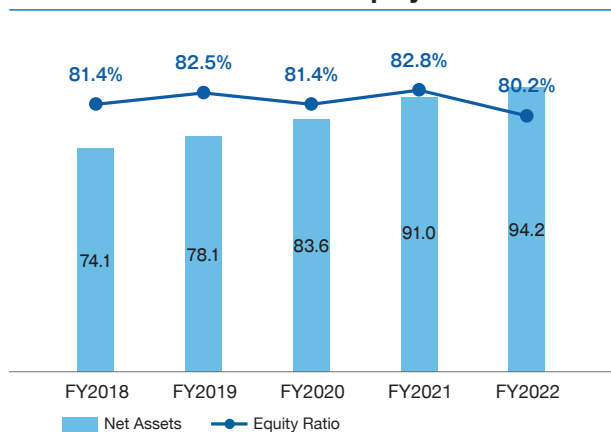
### Operating Profit (¥bn) / Operating Profit Margin



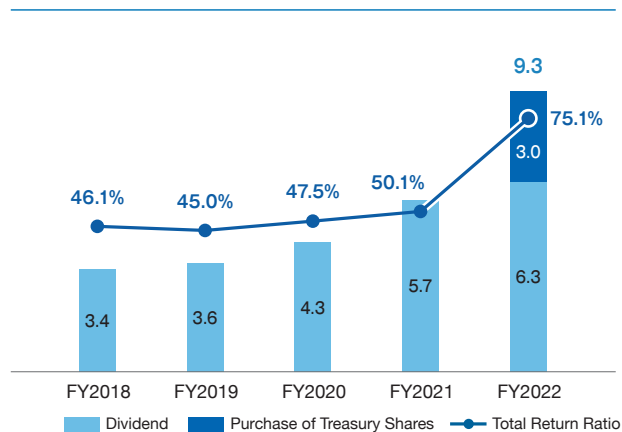
### Profit Attributable to Owners of Parent (¥bn) / ROE



### Net Assets (¥bn) / Equity Ratio

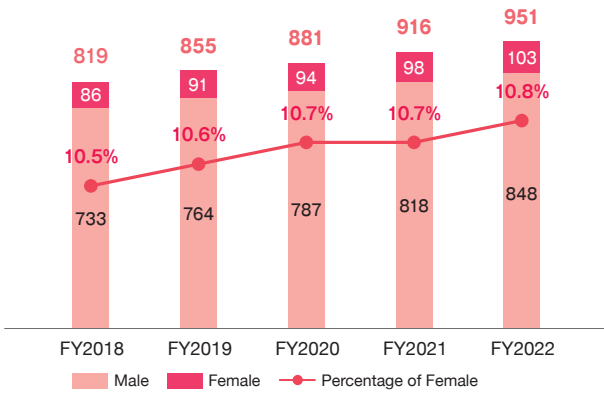


### Dividend (¥bn) / Purchase of Treasury Shares (¥bn) / Total Return Ratio

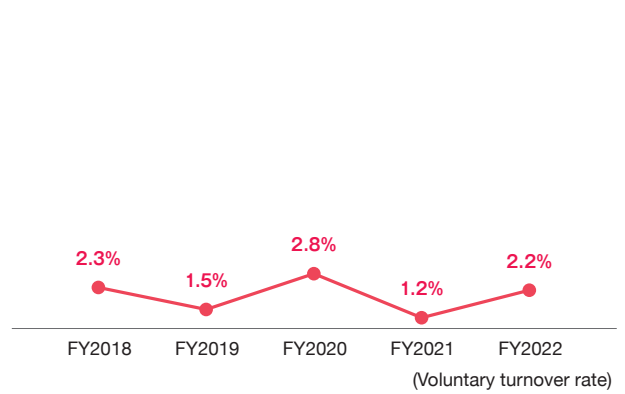


## Non-financial

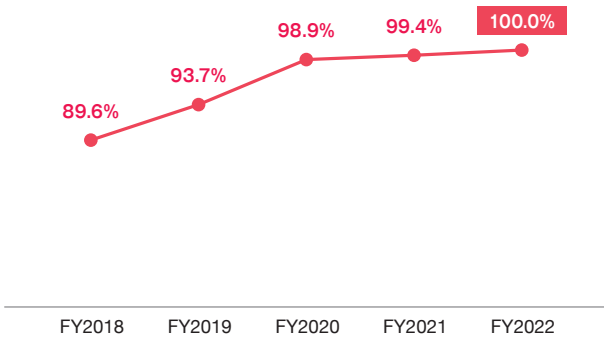
### Number of Employees



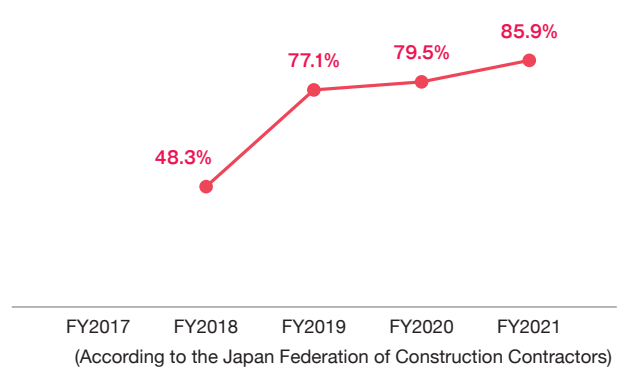
### Turnover Rate



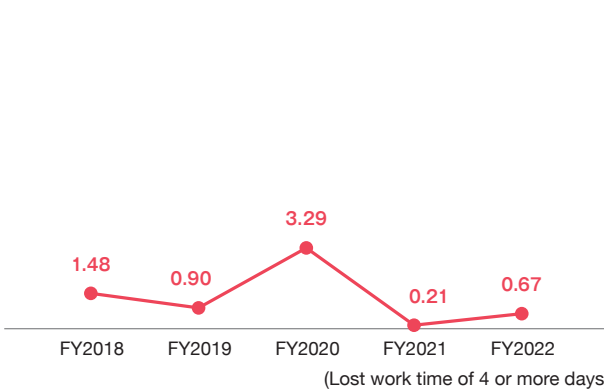
### Percentage of Employees Taking 100 or More Days Off per Year



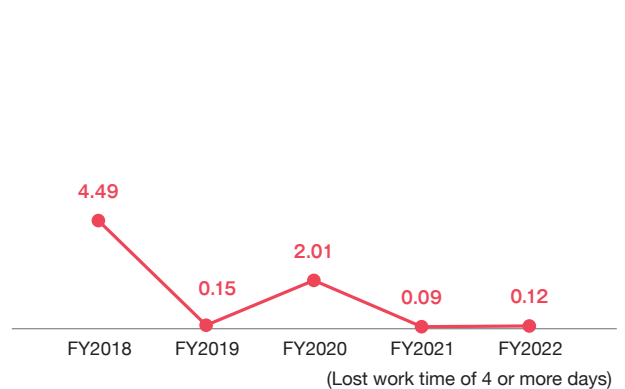
### Percentage of Construction Sites where "8 Days Off in 4 Weeks" is Achieved



### Lost Time Injury (LTI) Frequency Rate



### Lost Time Injury (LTI) Severity Rate



**SHO-BOND**



President and Representative Director

**Tatsuya Kishimoto**

# A Resolute Dedication to Using Knowledge and Technologies Backed by Many Years of Accomplishments to Contribute to Society

## Q. Why is SHO-BOND issuing an integrated report for the first time?

A. The public's interest in infrastructure maintenance is increasing year after year. I believe that SHO-BOND, as a leading company in this business sector, should provide even more information within our organization and to the public about business activities.

For more than 60 years, the SHO-BOND Group has contributed to society as a company specializing in the repair and reinforcement of infrastructure. We did not place emphasis on public relations activities because we operated mainly as a subcontractor in prior years and most of our work is public-sector projects. However, the frequency of calls from other countries about our services is increasing along with the importance of infrastructure maintenance. MITSUI & CO., LTD. contacted us about working together and we have recently started a joint overseas business. These events made us realize that we needed to give the public even more information about our organization.

Our integrated report is also a means of explaining to our workforce the philosophy and commitment of the SHO-BOND Group's senior management. We are determined to continue taking on new challenges. Most of our operations are currently in Japan. I believe that expanding our activities outside Japan will be vital to our ability to continue to grow. This is why the senior executives have a strong commitment to taking on the challenge of launching and enlarging operations in other countries. We want everyone in our group to be aware of this goal and understand the thinking behind it.

I believe that this report will help our employees and their family members to share the SHO-BOND's Purpose and to realize that we are contributing to society through our business activities of infrastructure repair and reinforcement.

## Q. How would you describe SHO-BOND from your standpoint as the president?

A. We are a unique company that specializes in repair and reinforcement work and is capable of providing a full line of services for these projects.

Repair and reinforcement projects differ from the construction of new structures with regard to designs. For new construction, a company is basically required only to finish the project as designed. At our projects, there is a drawing but we cannot know the true status of a structure's deterioration until we start working at the site. Only then can we know what types of procedures will be needed as well as the volume of work. For instance, what initially appears to be a mild sprain may turn out to be a broken bone requiring a completely different type of treatment. Another difference regarding repair and reinforcement work is time constraints because a structure often continues to be used during a project. This makes our work very difficult and explains why our customers seek a company with a broad range of expertise. SHO-BOND has a long record of providing customers with a full line of services, extending from analysis of deterioration to proposals for reinforcement, the supply of materials, and the actual repair and reinforcement procedures. I believe this breadth of our capabilities is why we have earned a reputation for reliability among our customers. Earning and retaining this trust is not easy. At SHO-BOND, this reputation is largely backed by our team of highly skilled engineers. We have a large number of engineers who are repair and reinforcement work enthusiasts and find this to be an extremely interesting and rewarding job.

Our Technical Research Institute (note 1) is one of our greatest strengths. Repair engineering (note 1) is a registered trademark of ours. This term expresses our commitment to shifting the basis of repair and reinforcement work from simply the experience of workers to the level of scientific research. Furthermore, this institute does not use our company name. This is because we want to advance repair and reinforcement technologies for society overall rather than only for

ourselves. The institute has a full lineup of state-of-the-art analytical equipment used for this field of study. I believe that no other laboratory anywhere is better equipped to study the degradation of concrete structures. To some extent, we accept requests for experiments or analysis from people outside our group to support progress involving repair engineering. One recent accomplishment is the use of knowledge acquired over many years to develop *AI Shindanshi*, an artificial intelligence diagnosis system (note 2) for the degradation of concrete structures.

 Comprehensive Maintenance System ▶P11

 Research and Development ▶P39

Notes:

1. Repair engineering (“補修工学<sup>®</sup>”) and the Technical Research Institute (“補修工学研究所<sup>®</sup>”) are registered trademarks of SHO-BOND CORPORATION in Japan.
2. *AI Shindanshi* (“AI診断士<sup>®</sup>”) is a registered trademark of SHO-BOND CORPORATION in Japan as of March 2023.

## Q. What are you doing now to make SHO-BOND even more powerful?

**A.** SHO-BOND is a unique company in the construction industry as a provider of a comprehensive maintenance services. But we should not become complacent. We want to preserve our competitive edge of being able to provide the same high level of work anywhere in Japan precisely because we specialize in maintenance. This is why we need to constantly upgrade our capabilities.


Our highest priority is human resource development. Large projects on expressways require advanced skills. The size of bridges, volume of traffic and other characteristics of these projects present big challenges. Only engineers with the necessary know-how and experience can handle this type of work. Years ago, we at times accepted expressway project orders where our



Safety patrols by the president

skills were inadequate. We learned difficult lessons as projects were delayed, we lost the trust of customers and our employees were overworked. To prevent this situation from happening again, we have been strengthening training programs, including by opening the Tsukuba Training Center in 2021. We are already receiving positive feedback from people who attend classes at this center.

In addition to human resource development, we are taking many other actions based on the current Medium-term Business Plan for building an even stronger foundation for our operations. Reinforcing our safety-first culture is one of our most important initiatives. Even a small oversight regarding safety can result in a fatality. A serious accident could also impact our sales and earnings if clients force us to suspend business operations. To reinforce everyone’s commitment to safety, our entire group is conducting initiatives for creating SHO-BOND culture of safety. Training programs at the Tsukuba Training Center based on actual jobsite tasks and safety awareness campaigns have proven to be effective. We are also implementing other strategic initiatives to create a stronger foundation for more growth.

 Medium-term Business Plan ▶P25

## Q. Why did you decide to leave your position at another company to join SHO-BOND?

**A.** After graduation, I started working at Kumagai Gumi, a large general contractor, because I wanted to work on big civil engineering projects. My 15 years at this company were very fulfilling as I participated mainly as a design engineer at tunnel, levee and other projects. During the construction sector downturn that began when Japan’s bubble economy collapsed, I realized that the industry was likely to shift from building new structures to the repair and reinforcement of existing ones. My visit to SHO-BOND’s Technical Research Institute convinced me that I wanted to become part of this organization.

Another reason I chose Kumagai Gumi was the large scale of the company’s operations outside Japan. The company had the intention of expanding their civil engineering business to other countries. In fact, overseas orders were a large share of their total sales. This may partly explain why I decided that we should expand SHO-BOND’s operations to other countries.



**Q. What were some of your most memorable jobs at SHO-BOND?**

**A.** My first job at SHO-BOND was a repair project of about ¥50 million at the Sennin Tunnel in Iwate prefecture. Traffic restrictions at the two-lane tunnel, which is about 2.5km long, made this project very challenging. We had to work on one side while vehicles used the single lane on the other side. Drivers had to wait as long as 15 minutes to enter the tunnel. I came up with the idea of providing a rest area to allow drivers to get out of their vehicles to relax and enjoy the beautiful scenery of this area. In addition, I hired a person who was friendly and particularly good at communicating as a guard at the tunnel project. With these measures in place, work to repair the tunnel went well. This type of challenge would not exist when building something new. I learned a valuable lesson about the importance of maintaining close ties with people living near a jobsite in order to complete a project.

Complaints that force a suspension of work are one of the biggest problems at construction projects. Work must take place in a manner that does not disturb nearby residents or create concerns for anyone else associated with the project. This is especially important for repair and reinforcement work on roads where traffic

needs to be restricted. A skillful field representative who can manage these matters differs somewhat from others.

In addition, the Sennin Tunnel project showed me where improvements were needed at SHO-BOND. In those days, there was little education and follow-up support for workers at the jobsite. As a result, there were differences in the skills of the people assigned to manage construction sites. This is one reason that I am now placing so much emphasis on human resource development.

Another memorable job is a bridge project where I learned a lesson by overcoming a mistake. We were driving large steel parts into a road but had not sufficiently checked what was underneath the road. We hit a water pipe that spewed water high into the air. Until then, most of SHO-BOND's projects were at bridges and there were not many engineers accustomed to placing materials in the ground. Though I was not in charge of the project, I rushed to the jobsite and help them as an excavation expert. I used my soil excavation know-how acquired at Kumagai Gumi and was able to stop the leak after about one month.

My experience at Kumagai Gumi was very helpful for the underground work. This taught me the importance of a workforce with diverse backgrounds. When an unfamiliar accident happens, someone with the know-how to respond properly will be needed. Maintaining a team of engineers encompassing many types of skills and experience reduces our exposure to risk concerning these accidents. Therefore, I always tell people to keep this diversity of backgrounds in mind when hiring new employees.

**Q. What is your view of the current business climate and the outlook?**

**A.** Repair and reinforcement projects are accounting for a steadily larger share of the demand in the construction industry. In Japan's expressway sector, the large-scale renewal and repair projects, totaling about ¥5 trillion between 2015 and 2030, are progressing. The outlook is positive, but we are always looking ahead to after these projects are completed. Local governments are responsible for the maintenance of most bridges in Japan. Many governments are encountering difficulties finding people with the right skills and the funding for maintenance. I believe that we can help them to solve these problems by using our decades of experience and highly skilled workforce. Other countries have similar problems concerning infrastructure maintenance. There is an increasing awareness that preventive maintenance can lower the total cost of the utilization of a bridge or other structure. However, most governments are not yet establishing budgets for these maintenance procedures. We need to pay attention to these issues and try to assist them by using our knowledge and experience.


In other countries, we are at the stage of raising awareness of the importance of preventive maintenance in order to start receiving orders. To accomplish this, we are working with MITSUI & CO., LTD. and seeking prominent partner companies in countries where we want to do business. We want to share our unique technologies, construction methods and materials with these partner companies that perform construction activities in other countries. We are also seeking to utilize our AI diagnosis expertise as we expand overseas. Our main targets are Thailand and other Southeast Asian countries, as well as North America. Every region has its own distinctive needs. In Thailand, for instance, we plan to use materials that are easy to work with because construction workers may have little or no experience at repair and reinforcement projects. In North America, we can share our exclusive earthquake resistance technologies that we have acquired over the years at our projects in Japan. Receiving orders there will require receiving official certifications and explaining our technologies and other innovations to design consultants. This process takes time, but I am confident that creating a sound base for our operations like this will start producing significant benefits in the near future.

I am also thinking about what kind of organization SHO-BOND should be 10 or 20 years from now. First of all, we must continue to make our highway and bridge maintenance business, which is our key strength, the



central component of our growth. Furthermore, although this is still only a rough idea, we should think about using this maintenance expertise to extend operations to railways, electric utilities and other market sectors in Japan. Building a network of relationships with companies in various industries could allow us to raise the awareness of the necessity of repair and reinforcement and to increase utilization of the technologies and knowledge we have cultivated. The market for the maintenance of structures is enormous. The SHO-BOND cannot cover all categories of this market by itself. Expansion to more markets will therefore require the creation of networks with other companies.

 Business Environment ▶P15


 Overseas Business ▶P38




### Q. What is SHO-BOND's stance regarding sustainability?

**A.** The SHO-BOND Group is a provider of maintenance for infrastructure and many other types of structures. By extending the lives of structures with proper maintenance, we significantly lower the consumption of energy and resources. This is much more responsible than using a structure until it fails and then replacing it. Maintenance lowers CO<sub>2</sub> emissions too. A lower cost over a structure's entire life cycle is another benefit. Consequently, our business activities are supporting progress regarding sustainability.

The contribution of our core business activities is not our only involvement with sustainability. We also have a large number of initiatives based on ESG materiality. For example, we use our business activities to reduce CO<sub>2</sub> emissions, we have rigorous water quality and hygiene management programs, we provide our people with safe, pleasant, productive workplaces, and we are always seeking ways to strengthen our governance.

 Materiality ▶P29

 Sustainability of SHO-BOND ▶P43

### Q. What is your message to the stakeholders of the SHO-BOND Group?

**A.** The importance of the SHO-BOND Group in society will continue to increase as the public becomes more aware of the need for infrastructure maintenance. We are one of only a very few companies specializing in this field. I believe that we have a responsibility to meet the expectations of shareholders, employees and all other stakeholders by resolutely dedicating ourselves to using knowledge and technologies backed by many years of accomplishments to contribute to society. This integrated report with information about our past, present and vision for the future is one way to express our commitment to fulfill this responsibility. I want everyone at our group to read this report so that we can all move forward as a unified team to accomplish the goals that we all share.

Our corporate philosophy is the fundamental guideline for all of our group's activities. The philosophy embodies the thinking of our founder Akira Ueda. The spirit of Mr. Ueda, who identified trends in the business climate and was first to recognize the need for

infrastructure repair and reinforcement services, lives on in our corporate philosophy. Our senior executives embrace this philosophy and make it an integral part of their words and actions. Our employees use the philosophy as a guiding principle for the activities needed to accomplish their respective missions. I want the SHO-BOND Group to continue advancing together by adhering to this philosophy.

I am very grateful for the support of our shareholders. We will continue to aim for sustained growth along with suitable distributions to shareholders. I hope that our shareholders will share with us the awareness of the importance of contributing to society through our business activities. I look forward to your continued support.

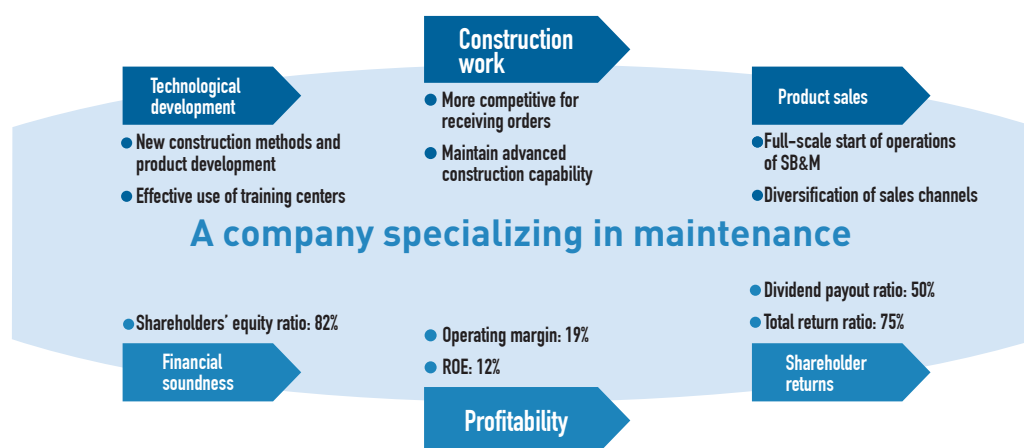


# Medium-term Business Plan

In the “Medium-term Business Plan (the fiscal year ended June 30, 2022 - the fiscal year ending June 30, 2024),” we will work to achieve sustainable profit growth and the improvement of corporate value under the basic policy of “Honing our inherent strengths what it is that makes us SHO-BOND.” We defined the “what it is that makes us SHO-BOND” in terms of business as “construction work capability,” “technological development capability” and “product sales capability,” and in terms of management as “profitability,” “financial soundness” and “shareholder returns.” In accordance with the Medium-term Business Plan, we are trying to refine SHO-BOND’s strengths and proceeding with building a system ready for the stage of further accelerated growth. For the fiscal year ended June 30, 2022, we set steady results for “upgrade the order receipt strategy utilizing the in-house company structure” and “more activities for large projects and construction work capability” as business strategy. In terms of stronger foundations for growth, we focused on various measures related to human resources operation, such as “to become more competitive for capturing orders by developing human resources capable of adapting to changing markets” and “a strong safety culture and rigorous on-site training.”

## “Honing our inherent strengths what it is that makes us SHO-BOND”

- 1 Further initiatives for large-scale construction by reinforcing organizational capabilities
- 2 Develop new technologies ahead of other companies and take on the challenge of a new product sales strategy
- 3 Increase orders through human resource development that can respond to market changes and the increase of productivity
- 4 Manage both profitability and financial soundness and enhance shareholder returns
- 5 More ESG activities and contributions to SDGs



### Business Strategy

Strategic Initiatives	Progress in FY2022
Upgrade the order receipt strategy utilizing the in-house company structure	In-house companies hold the large project review meetings to discuss the order receipt strategy and check the optimal appointment of engineers, leveling of quarterly sales, and the construction work capability involving partner companies.
More activities for large projects and construction work capability	Both in-house companies have sought to secure construction work capabilities by appointing partner companies in larger areas than ever. SHO-BOND received 21 large orders of 1 billion yen or more (9 orders in the previous fiscal year), and the share of sales from expressway companies rose up to 60% (47% in the previous fiscal year).
Challenge a new product sales strategy by SB&M	We have worked on business activities in Thailand and North America, and approached new private companies and sales of foreign products in Japan though the impact of the COVID-19 crisis is still significant. In May 2022, we have started local manufacturing of our products in Thailand.
More joint activities by increasing cooperation among group companies and other companies	We as a whole have aimed to reduce construction costs by having Kyna-Tech undertake water jet construction work within the group. In addition, a new cross-company team has been established in order to strengthen partnerships with partner companies and to pursue further cost reduction measures.
New technologies for preventive infrastructure maintenance	We are researching new technologies in various fields, and some developed inorganic materials have been utilized in construction projects. We have also worked to shorten delivery time and reduce costs for existing products and to make resin-based ones non-poisonous.

### A Stronger Foundation for Growth

Strategic Initiatives	Progress in FY2022
To become more competitive for capturing orders by developing human resources capable of adapting to changing markets	The workforce reached 951 at the end of June 2022 (916 at the end of June last year). The operation has been started at Tsukuba Training Center in January 2022, providing practical training for SHO-BOND young people and the staff of partner companies. Both in-house companies also have implemented their own human resource development measures to raise the level of personnel capabilities.
Personnel system reforms that reflect the changing business environment	With the keywords of “satisfaction”, “growth”, “confidence” and “sense of fulfillment”, we have embarked on a reform of personnel systems. External consultants were brought in to ensure objectivity, and the project is being carried out while taking into account internal needs.
A strong safety culture and rigorous on-site training	The action plans for creating a safety culture are steadily progressing, and new initiatives such as remote and video-based training have been started. The frequency rate (0.67), the KPI, is below the national average.
Use of the digital transformation (DX) for higher productivity	In terms of on-site DX, we have encouraged broad use of digital tools such as construction management applications and 3D design software, and the development of an AI damage diagnosis system has advanced to the level of a practical study.
Build a framework for responding to ESG issues	In July 2022, we expressed our support for the TCFD recommendations and calculated our greenhouse gas emissions under the guidance of external consultants. In addition, we have promoted the disclosure of non-financial information, including the formulation of various policies and KPIs related to ESG.

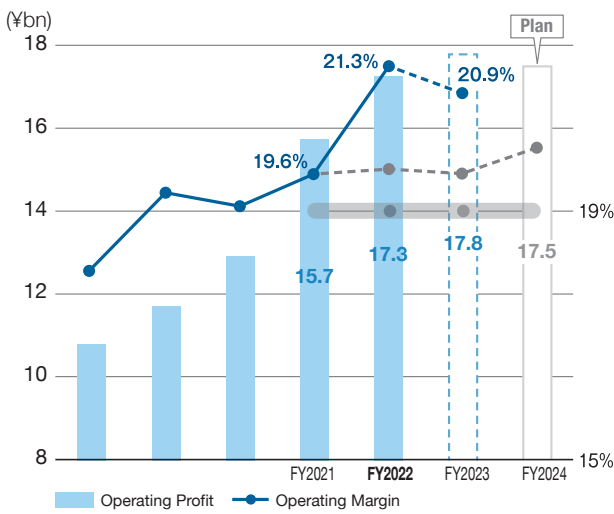
## Financial Targets

SHO-BOND will aim for sustainable growth of 10% or more over three years with the operating profit target of ¥17,500 million in the final year by increasing net sales further and maintaining the operating profit ratio at a high level. By continuing management that prioritizes capital efficiency, return on equity (ROE) will be maintained at 12% or more through the medium-term period.

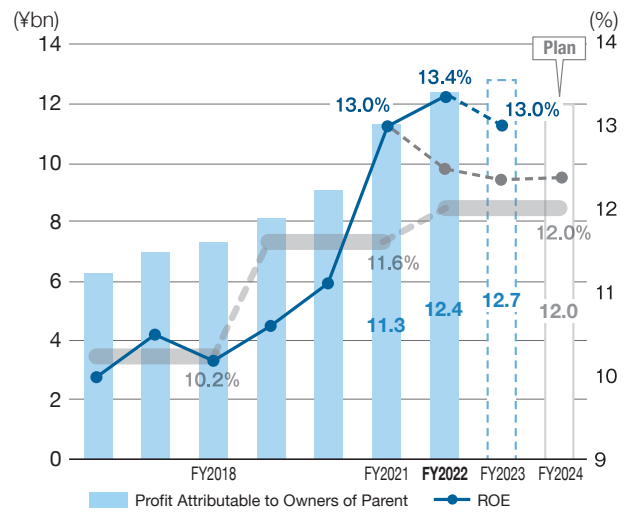
	FY2022 Results	FY2024 Targets
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Net Sales	81.19 billion yen	87.5 billion yen
Operating Profit	17.26 billion yen	17.5 billion yen
Profit Attributable to Owners of Parent	12.36 billion yen	12.0 billion yen
ROE	13.4%	12.0%

### Operating Profit



### ROE & Profit Attributable to Owners of Parent



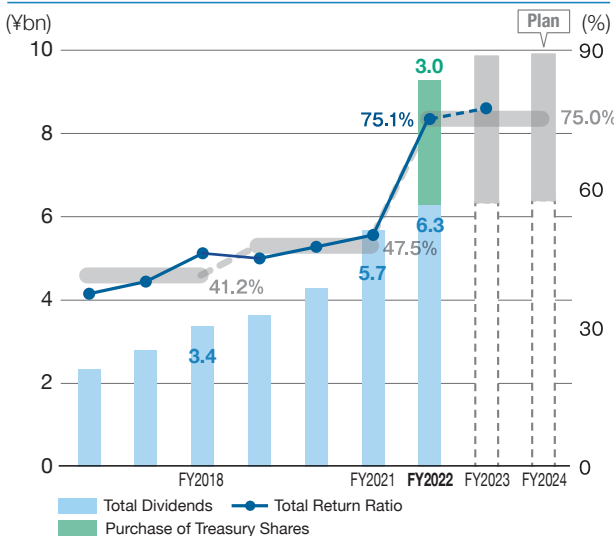
## Capital Policy

About dividends for the continuous and stable return of profits, SHO-BOND will aim to steadily increase the dividend amount per share by maintaining a dividend payout ratio of 50% or more. Additionally, we will purchase ¥10,000 million of treasury shares over three years, and maintain a total return ratio of 75% or more. We will reduce the ratio of cross-shareholdings to net assets by selling 20% on a fair value basis.

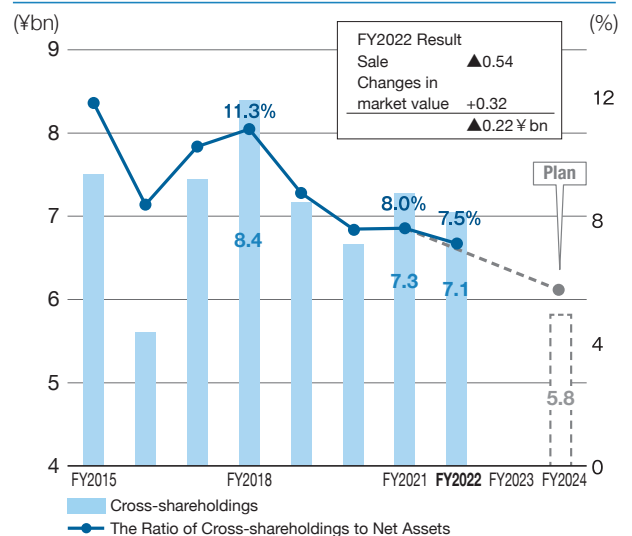
	FY2022 Results	FY2024 Targets
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Dividend Payout Ratio	51.1%	50.0%
Total Return Ratio	75.1%	75.0%

### Total Return Ratio



### Cross-shareholdings



# Message from the Chief Financial Officer



SHO-BOND is the only listed construction company in Japan that is a specialist in infrastructure maintenance. The stock has a high PBR due to this unique identity and financial management with emphasis on the ROE by prioritizing profitability and carefully selecting orders to accept.

Director and General Manager of Corporate Planning Department  
**Yasuhiro Sekiguchi**

## Results of Operations

The start of large-scale renewal and repair projects by all expressway companies has greatly changed Japan's infrastructure maintenance market. These very costly projects are difficult and will take a few years to complete. As a result, the characteristics of this market differ from prior years when most orders were from the national and local governments.

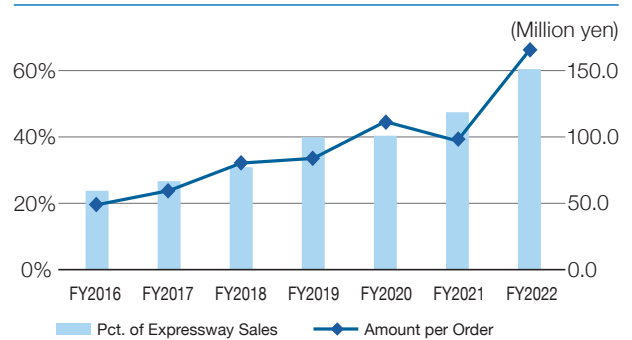
The SHO-BOND Group is taking many actions to take on these large expressway projects. One measure is revisions to the internal infrastructure for conducting business operations that began with the previous Medium-term Business Plan (FY2019-FY2021). As shown in Figure 1, the size of each new order has been increasing and expressway company projects rose to 60% of all construction sales in FY2022.

The large-scale renewal and repair projects of the expressway companies will not be based on the fiscal year of the Japanese government, which makes these activities different from public-works projects of the national and local governments. Orders can be received and work can proceed throughout the year. The resulting higher utilization rate of construction engineers is levelling off, as shown in Figure 2.

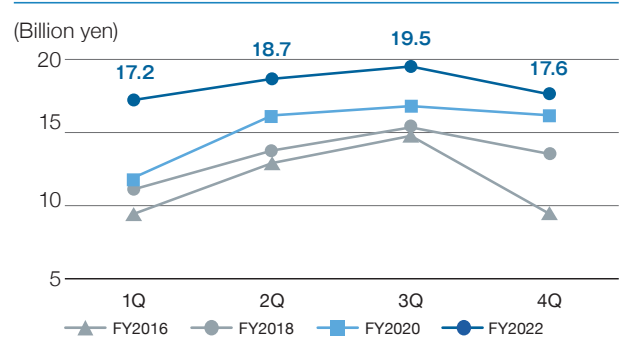
The increase in large projects, backed by benefits of numerous initiatives and the efforts of our engineers, has significantly raised our labor productivity, as shown in Figure 3. During the past six years, this figure has increased about 42%.

Another big change due to the larger number of big projects is the ability to maintain large order backlogs at the end of every fiscal year, as shown in Figure 4. Most national and local government orders can be completed in the same fiscal year that the orders were received. Therefore, these orders generally do not become part of the fiscal year-end backlogs. The larger volume of this backlogs has raised the stability of sales and earnings. As a result, beginning with the previous Medium-term Business Plan, we have been increasing the workforce and further upgrading our ability to receive orders.

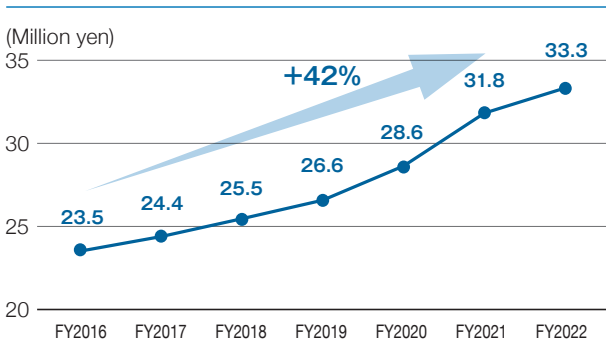
**Figure 1: Percentage of Expressway Sales and Amount of Orders**



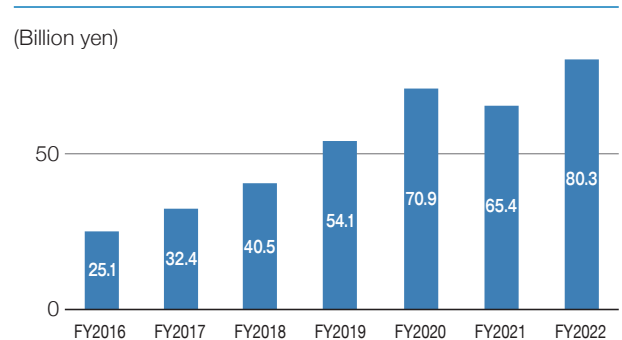
**Figure 2: Quarterly Construction Sales**



**Figure 3: Labor Productivity**



**Figure 4: Order Backlogs (at the End of Fiscal Year)**



## Financial Management Policy

"Honing our inherent strengths what it is that makes us SHO-BOND" is the central theme of the current Medium-term Business Plan (FY2022-FY2024). In terms of finances, what makes us SHO-BOND are financial soundness, profitability and shareholder returns. Figure 5 shows our return on equity (ROE) and price-to-book ratio (PBR) during the past several years. For a high PBR, we must maintain an equity spread by keeping our ROE higher than the cost of equity. We will continue to place priority on the ROE. In addition, we will enhance the disclosure of non-financial information, including environment-related information, as we continue the IR activities that we have been focusing on. We believe that raising the visibility of the outlook for results of operations will hold down the cost of equity.

## Shareholder Returns

Distributing earnings to shareholders is one of our highest priorities. The basic policy is to pay a dividend consistently that is based on results of operations. Figures 6 and 7 show our net income and shareholder returns during the past four years. Since FY2018, net income has increased 69% and shareholder returns, including the purchase of treasury shares, are up 176%. Furthermore, the average annual income of employees increased 35%. Based on our policy of distributing earnings to shareholders and employees, improving remuneration for employees is a priority along with raising shareholder returns.

## Cross-shareholdings

As a rule, the SHO-BOND Group does not purchase or hold the stock of suppliers and other business partners with the exception of cases where purchasing and holding stock helps conduct business operations efficiently and maintain and strengthen business relationships, thereby contributing to the medium to long-term growth of its corporate value. When a company that holds our stock as a cross-shareholding notifies us of the intention to sell this stock, we will never make any attempt to stop this sale. The current Medium-term Business Plan includes the plan to reduce the ratio of cross-shareholdings to net assets from about 8% to 6% by selling 20% on a fair value basis (as of June 30, 2021).

## Further Challenges for Improving Productivity

As was explained earlier, Japan's infrastructure maintenance market has been growing year after year since 2016. Sales and earnings of the SHO-BOND Group have increased significantly along with measures to receive orders for large-scale projects. We believe that the expansion of this market will continue at a moderate pace. Numerous activities are under way for more improvements in productivity. At the Tsukuba Training Center, our employees as well as people from partner companies receive training that will enable them to perform construction tasks even more efficiently. In addition, we plan to use the operations of our overseas infrastructure maintenance joint venture with MITSUI & CO., LTD. for raising earnings per employee in our construction material sales business. The SHO-BOND Group, as a specialist in infrastructure maintenance, will continue using productivity initiatives possible only at an organization with our expertise and resources in order to aim for the consistent growth of sales and earnings.

Figure 5: ROE and PBR

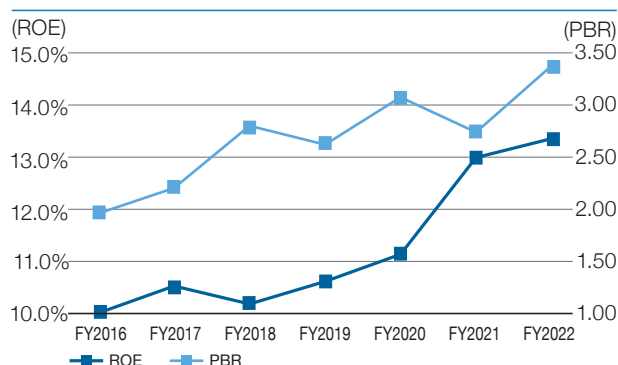


Figure 6: Profit Attributable to Owners of Parent

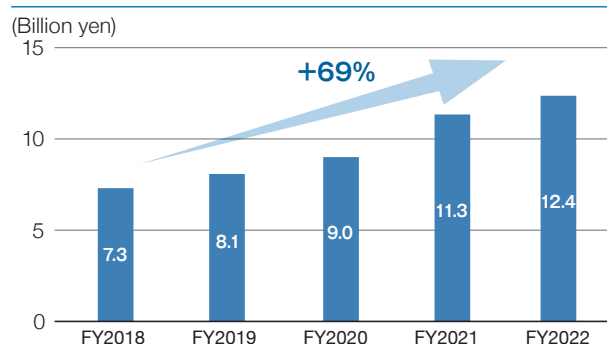
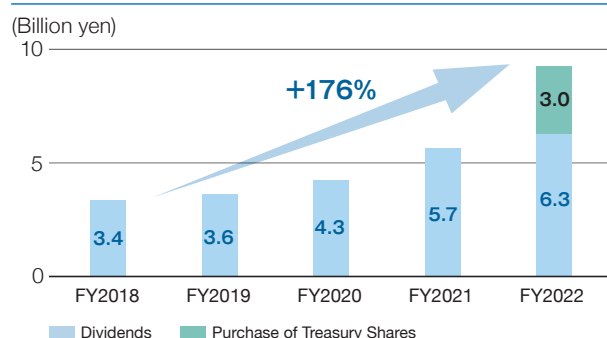


Figure 7: Total Amount of Shareholder Returns



# Materiality

The SHO-BOND Group has designated four Materialities based on social demands and the expectations of stakeholders. The Materialities are our priorities in order to achieve sustainable growth with our stakeholders as the SHO-BOND Group plays a role in solving social issues while continuing to increase corporate value.

To identify Materiality, we evaluated social issues from the standpoints of the importance to stakeholders and the importance to business operations. Then 22 social issues that were particularly important from both standpoints were selected as the issues that the SHO-BOND Group should target.

We have also established a Sustainability Policy to improve the medium to long-term corporate value, and contribute to creating a sustainable society by continuously implementing initiatives in accordance with materiality priorities.

## Process to Identify Materiality



## Materiality and the Sustainable Development Goals

Social issues	Materiality	Corresponding SDGs
<ul style="list-style-type: none"> <li>S Establish a resilient infrastructure</li> <li>S Leverage comprehensive maintenance resources to contribute to society</li> <li>S Ensuring occupational health and safety</li> </ul>	<p><b>Comprehensive maintenance system backed by the organizational capabilities</b></p> <p>Contribute to the development of social infrastructure by using partner companies interactions and the group's aggregate resources for all maintenance processes, whether large or small.</p>	<p><b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b> Ensure sustainable consumption and production patterns.</p> <p><b>17 PARTNERSHIPS FOR DEVELOPMENT</b> Strengthen the means of implementation and revitalize the global partnership for sustainable development.</p>
<ul style="list-style-type: none"> <li>S Develop and use technologies for social issues</li> <li>S Activities to increase productivity</li> <li>S Recruiting and training programs</li> <li>S Employee retention and sound labor relations</li> <li>S Improve economic performance</li> </ul>	<p><b>Productivity improvement through technology development</b></p> <p>Improve productivity by combining chemical and civil engineering technologies to create new technologies and by conducting training and education programs.</p>	<p><b>8 DECENT WORK AND ECONOMIC GROWTH</b> Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> <p><b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.</p>
<ul style="list-style-type: none"> <li>G Strengthen corporate governance</li> <li>G Strengthen risk management</li> <li>G Compliance with laws and regulations</li> <li>G Fair business practices</li> <li>G Information security measures</li> <li>G Proper management of intellectual property</li> </ul>	<p><b>Sound governance and measures for more improvements</b></p> <p>Make sound and transparent governance to maintain the foundation for relationships with all stakeholders.</p>	<p><b>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p>
<ul style="list-style-type: none"> <li>E Sustainable use of resources</li> <li>E Assessment of environmental impact of projects</li> <li>E Proper management of waste materials</li> <li>E Measures to combat climate change</li> <li>S Measures involving Japan's falling population</li> <li>S Develop sustainable cities</li> <li>S Health and safety of customers and consumers</li> <li>S Community relationship</li> </ul>	<p><b>Contribution to the development of sustainable cities</b></p> <p>Position the social infrastructure maintenance business as a key component of the development of sustainable cities that are environmentally responsible.</p>	<p><b>11 SUSTAINABLE CITIES AND COMMUNITIES</b> Make cities and human settlements inclusive, safe, resilient and sustainable.</p> <p><b>13 CLIMATE ACTION</b> Take urgent action to combat climate change and its impacts.</p>

E Environment   S Social   G Governance

## Sustainability Policy

### Comprehensive Maintenance System backed by the organizational capabilities

#### S Comprehensive maintenance capabilities (investigation, designs, construction) for public safety and confidence

- We work closely with customers on every stage of maintenance projects, including investigation, designs and construction, and draw on the strengths of all group companies to provide services of the highest quality for ensuring infrastructure safety.
- We use our expertise as an infrastructure maintenance specialist for infrastructure repair and reinforcement projects for resistance to natural disasters and other threats.

#### S Workplace health and safety

- Our highest priorities are the protection of life and the safety of construction activities. Based on this philosophy, our goal is no workplace accidents at construction and manufacturing sites. We have rigorous health and safety measures that include activities for reducing vulnerability to risk factors.
- There are many programs for the physical and mental well-being of employees, including measures to eliminate long working hours and provision of mental health care.

### Productivity improvement through technology development

#### S Develop and use technologies for social issues

- We use advanced technologies combining technologies in the fields of chemistry and civil engineering for the development of environmentally and socially responsible materials and construction methods.

#### S Recruiting and training programs

- We do everything possible to hire many types of people and make hiring decisions with fairness and no discrimination of any kind.
- We maintain a training and education infrastructure for giving people the knowledge to play key roles in the sustainable growth of the SHO-BOND Group. We are dedicated to giving everyone the opportunity to reach his or her full potential.
- We will use a fair personnel system for evaluating performance to retain talented people and ensure that knowledge is passed on. We will put focuses especially on giving younger employees opportunities to advance and providing many job opportunities for seniors.

#### S Activities to increase productivity

- Strengthening technological skills and improving operating efficiency results in more added value and working style reform activities contribute to higher productivity.
- We use many types of equipment for raising productivity in order to raise the efficiency of all tasks required for investigation, design, construction and other types of work.

#### S Employee retention and sound labor relations

- We comply with all labor laws and regulations and have established numerous programs and frameworks for maintaining pleasant and productive workplaces at group companies and our partner companies.
- We maintain sound labor relations by encouraging dialogues between labor and management, providing access to consultations and using other measures.

### Sound governance and measures for more improvements

#### G Strengthen corporate governance

- To meet the expectations of stakeholders for sustainable growth, our corporate governance is structured for transparency, fairness, and the ability to make management decisions with speed and confidence.

#### G Strengthen risk management

- Numerous measures are taken for the proper management of risk, including a system of internal controls, a culture of recognizing and prudently taking on risk, and a risk identification, evaluation and monitoring system that incorporates ESG considerations.

#### G Strict compliance with laws and regulations/fair and ethical business practices

- There are extensive education and training programs about compliance for employees as well as monitoring and other activities in order to maintain a framework for fair business practices.

#### G Information security measures

- IT systems and other measures are used for information security and there are strict measures for the protection of personal and other confidential information. In addition, education and training programs are provided to employees in order to reinforce their commitment to information security.

#### G Proper management of intellectual property

- We properly manage and protect our intellectual property rights and perform surveys and other procedures to prevent the infringement of the rights of others.

### Contribution to the development of sustainable cities

#### E Sustainable use of resources

- We contribute to the sustainability of public-sector resources by using advanced maintenance technologies for life extension of infrastructure.
- We are dedicated to playing a role in creating a society where resources are recycled. We use renewable resources and parts across the entire supply chain as much as possible and utilize resources in a manner that supports sustainability.

#### E Proper management of waste materials

- We use proper and responsible activities for the management and disposal of waste materials created by our business operations.

#### E Measures to combat climate change

- We are contributing to the fight against climate change by constantly working on the reduction of greenhouse gases generated by our business operations.
- We understand that life extension of infrastructure helps lower greenhouse gas emissions. Skills as an infrastructure maintenance specialist are used for the utilization of business operations to play a part in combating climate change.
- We are committed to using infrastructure reinforcement for natural disaster resilience and other business activities in order to play a role in the fight against climate change on the entire society.

#### E Assessment of environmental impact of projects

- We will comply with the environmental requirements of every project and take other actions for minimizing the effects of our activities on the environment and society.

#### S Development of sustainable cities as Japan's population ages and declines

- We will use our maintenance expertise to supply practical and effective solutions for problems involving aging infrastructure and other public facilities as Japan's population declines.

#### S Health and safety of customers and consumers

- We will maintain the management systems required to ensure the health and safety of the people who use the infrastructure we help maintain and of customers who purchased building materials from us. We will respond properly if a problem occurs.

#### S Community relationships

- We understand that the infrastructure can have a significant effect on communities and regions and will maintain strong lines of communication in order to earn the trust of the public.

# Construction in Japan East Japan In-house Company



Under the basic operational policy of "Build a robust foundation for the future to become a company that can keep pace with changes in the times," we have established and are pursuing a business strategy which leverages the technologies we have cultivated and facilitates further development that will connect to future generations. We have named this strategy Triple P for its focus on three main areas: Project, Policy, and Progress.

## Noriyuki Hosaka

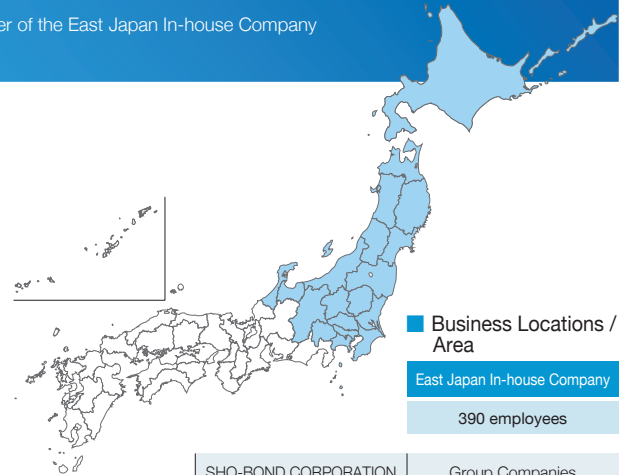
Managing Director and General Manager of the East Japan In-house Company  
SHO-BOND CORPORATION

## Overview of East Japan In-house Company

The East Japan In-house Company is an organizational framework covering North and East Japan, as shown on the map to the right. We have great expertise in the repair and reinforcement or seismic retrofitting work of a broad range of road structures and buildings. We also have a specialist company under our umbrella (Kyna-Tech) that possesses unique core technology of a high-frequency core drilling method, which is 2.5 times faster than conventional method. It plays an active role in projects both within and outside the Group. We have also started building a framework for carrying out high pressure water jet work as a new business area.

Some of the areas we cover experience heavy snowfall, so in order to keep sales steady, we need to be strategic in how we accept orders, such as taking on large-scale urban construction projects and orders from local governments and the private sector to offset the suspension of work on expressways in these regions during the winter.

We strive to take on difficult large-scale expressway construction projects in urban areas as a joint venture with bridge manufacturers. In addition to securing profits, we engage in these projects to improve the technical abilities of our young engineers. Also, as the number of large-scale projects we receive is growing, we are using the Tsukuba Training Center and other resources to cultivate the employees of partner companies as well.

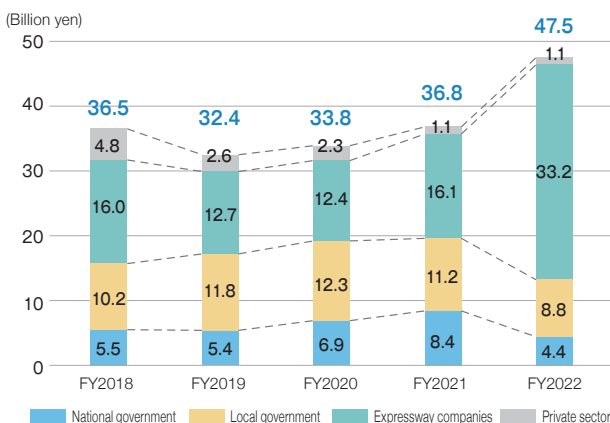


	SHO-BOND CORPORATION	Group Companies
Kita-Nihon Regional Office	<ul style="list-style-type: none"> <li>Hokkaido Branch</li> <li>Minami-Tohoku Branch</li> <li>Kita-Tohoku Branch</li> </ul>	<ul style="list-style-type: none"> <li>TOHOKU KAKO CORPORATION</li> </ul>
Shutoken Hokuuriku Regional Office	<ul style="list-style-type: none"> <li>Tokyo Branch</li> <li>Chiba Branch</li> <li>Kanto Branch</li> <li>Hokuriku Branch</li> </ul>	<ul style="list-style-type: none"> <li>KAKO CORPORATION</li> <li>KANTO KAKO CORPORATION</li> <li>YOKOHAMA KAKO CORPORATION</li> <li>NIIGATA KAKO CORPORATION</li> <li>Kyna-Tech</li> </ul>
	7 branches	6 group companies

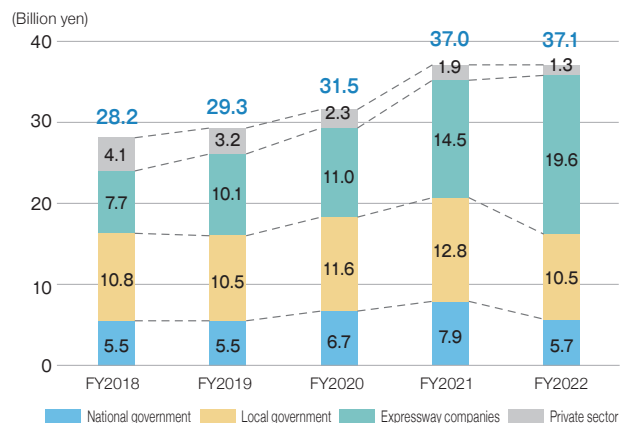
## Construction Orders and Net Sales

We take on construction orders from expressway companies, national and local governments in a well-balanced manner. In particular, we receive a lot of orders from local governments in the capital region, including the Tokyo. In regard to expressway construction, we have been driving growth in orders since FY2022, after the Tokyo Olympics. We have also been trying out new technologies through joint ventures with partners, including major construction companies and bridge manufacturers.

### Construction Orders: East Japan In-house Company



### Construction Sales: East Japan In-house Company





## Main Initiatives

In order to build a foundation for the future, we think it is important to cultivate people, both our own employees and those of partner companies, so we are focusing our energy on safety initiatives and the development of human resources.

### Creating a Safety Culture

We have formulated an action plan for creating a safety culture within the in-house company and we are implementing initiatives in accordance with this plan.

This includes making communication the highest priority, so we are implementing measures for enhancing both organizational and individual capabilities of ensuring safety on construction sites.

Specifically, we are working to deepen mutual understanding between the in-house company, our employees, and partner companies by carrying out conversation-based patrols and issuing in-house newsletters.



### Empowering Female Engineers and Non-Japanese Employees

We are actively employing female engineers at construction sites and some of them take a lively part in on-site jobs balancing work and family life. Currently, we have nine female engineers on staff, one of whom is non-Japanese.

We are also actively working to recruit and develop non-Japanese human resources so that we will be able to respond to future changes in the business environment. We have already launched an initiative to recruit non-Japanese engineers and we are actively engaged in developing them, including at partner companies. This development is not only being carried out through on-site instruction, but also through measures such as educational support that enables them to gain official Japanese qualifications.



A non-Japanese employee and female engineers

Non-Japanese employees recruited (2020 to present)	2
Non-Japanese employees in training	7

Note: As of June 30, 2022

## Topics

### Dispatching Instructors to the Tsukuba Training Center

As part of our human resource development efforts, we have dispatched more than 10 veteran engineers to act as instructors for construction management training aimed at less-experienced employees and workers from partner companies. The in-house instructors are leveraging their experience to create their own courses and study programs and these have been well received by the trainees.



### Recycling Work Clothes and Helmets

We are carrying out an initiative for recycling unneeded work clothes, helmets, and other equipment. The clothes, helmets, and equipment collected at each of our business locations are put to good use as an industrial resource.

- FY2022 Collection Results (East Japan In-house Company)
- Work clothing: 298 pieces
- Helmets: 27
- Other (cold weather protection, etc.)



### In-house Newsletters

Each of our regional offices creates its own in-house newsletter. The Kita-Nihon Regional Office's newsletter has been named *Eco-Hiiki* (Eco Promoter) and includes content that aims to strengthen ties with partner companies. The Shutoken Hokuriku Regional Office's newsletter is called *Anzen Dayori* (Safety News) and it aims to inform staff of revisions to laws and regulations and foster a strong awareness of safety in accordance with in-house rules. We will continue to issue newsletters as a tool for fostering communication within the in-house company and with partner companies.



# Construction in Japan West Japan In-house Company



At the West Japan In-house Company, we aim to achieve further growth by positioning “maintaining growth,” “employee education,” and “strengthening our base” as priority issues. Accordingly, we will strengthen our foundation through investment in people. When we receive orders for large-scale construction projects from expressway companies, we decide whether or not to take an order to establish a proper workforce framework and personnel allocation.

## Tsuyoshi Koga

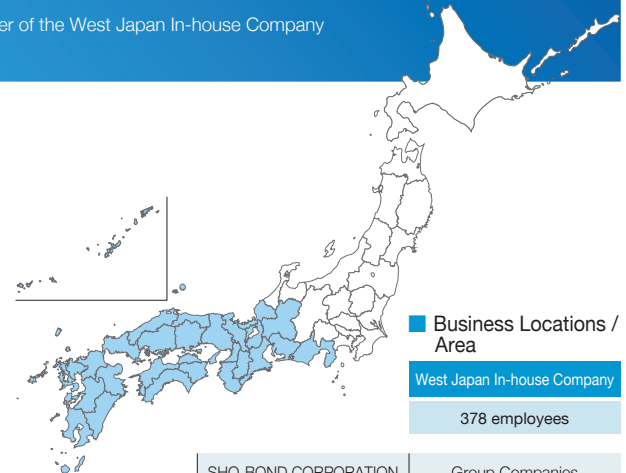
Managing Director and General Manager of the West Japan In-house Company  
SHO-BOND CORPORATION

## Overview of West Japan In-house Company

The West Japan In-house Company comprises three regional offices (Chubu, Kinki, and Nishi-Nihon) and each of these regional offices is affiliated to the Kako Group companies. We operate over a wide area covering South and West Japan.

Each branch of SHO-BOND CORPORATION primarily undertakes general construction contracts with a focus on large-scale projects. The Kako Group companies receive orders from national and local governments taking advantage of being based in the district, as well as undertake subcontract work from major construction companies. We ask our partner companies to take on work within the in-house company on a cross-regional basis and these partners are playing an important role in strengthening our overall construction framework.

When taking on large-scale projects, we compile information from each region under the company’s area, while cooperating with the head office, such as anticipated expressway construction orders and personnel information, so that it is available on the in-house company-wide basis. For human resources development, we approach skill improvement from a peculiar perspective. We carry out a questionnaire of all young trainees in advance and then plan experience-based training programs that cover topics identified through the results.

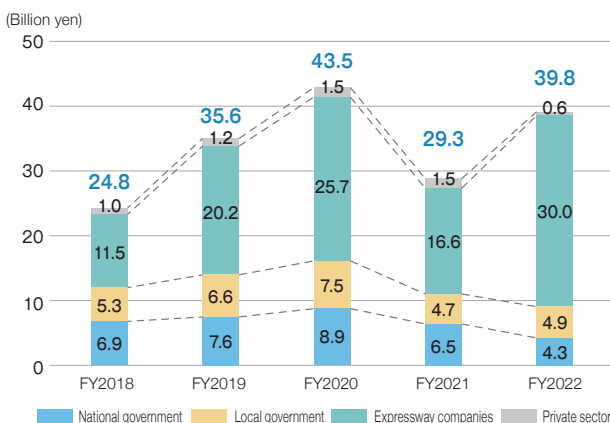


	SHO-BOND CORPORATION	Group Companies
Chubu Regional Office	<ul style="list-style-type: none"> <li>Nagoya Branch</li> <li>Shizuoka Branch</li> </ul>	<ul style="list-style-type: none"> <li>CHUBU KAKO CORPORATION</li> </ul>
Kinki Regional Office	<ul style="list-style-type: none"> <li>Osaka Branch</li> <li>Kyoto Branch</li> <li>Kobe Branch</li> </ul>	<ul style="list-style-type: none"> <li>KANSAI KAKO CORPORATION</li> </ul>
Nishi-Nihon Regional Office	<ul style="list-style-type: none"> <li>Chugoku Branch</li> <li>Shikoku Branch</li> <li>Kyushu Branch</li> </ul>	<ul style="list-style-type: none"> <li>CHUGOKU KAKO CORPORATION</li> <li>SHIKOKU KAKO CORPORATION</li> <li>KYUSHU KAKO CORPORATION</li> </ul>
	8 branches	5 group companies

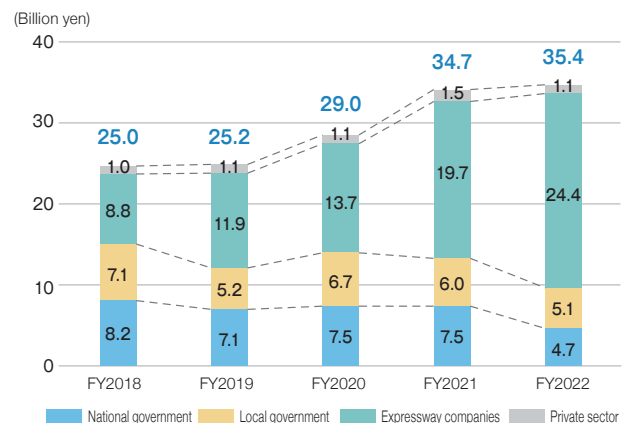
## Construction Orders and Net Sales

We actively undertook large-scale construction orders from expressway companies to advance the Group’s aims of taking on larger construction projects and leveling off operation. We have even taken on two large-scale construction contracts with an initial value in excess of ¥7 billion. In addition to building a construction framework suitable for handling large-scale projects, we have been improving the gross margin of construction work under strict cost control.

### Construction Orders: West Japan In-house Company



### Construction Sales: West Japan In-house Company



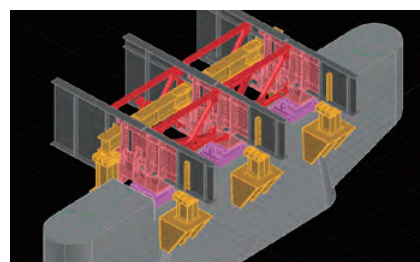
## Main Initiatives

In order to further enhance the Group's strengths and accelerate growth, we are working on upgrading the order receipt strategy and more activities for large projects and construction work capability (the targets of the current Medium-term Business Plan). At the same time, we are advancing the following initiatives to develop human resources and establish a robust safety culture.

### Utilizing 3D-CAD at Construction Sites

We are gradually introducing 3D-CAD to construction sites in order to raise productivity and quality and to visualize construction processes. 3D models enable users to check the condition of a structure from various angles, and they can be used to improve construction quality by discovering inconsistencies between drawings and the actual structure, as well as by identifying any points of interference between newly added members and the existing structure. Issues can be solved before work even begins by using 3D model simulations at the design stage. This contributes to making construction processes more efficient and to raising productivity. It is also possible to use 4D models, which are 3D models with a time axis added, at the same time. This enables the visualization of the entire construction process, from the pre-construction stage to completion, facilitating a shared awareness among large numbers of people. In terms of safety, 4D models can also be used to check each step of a work process in advance to understand and predict potential hazards, thereby enhancing safety.

A 3D model simulation



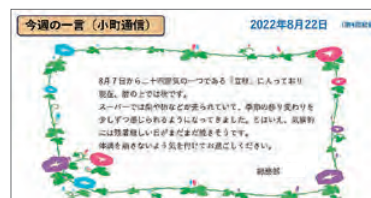
The actual completed structure



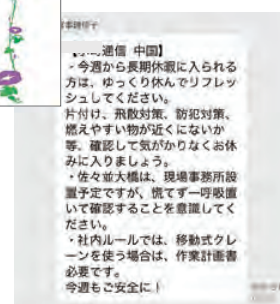
### Unique Communication that Improves Safety and Team Unity

The Nishi-Nihon Regional Office has started sending all team members *Komachi Tsuushin*, which are communications aimed at improving safety awareness. Female administrative staff, who usually stay at office, use social media to send safety awareness messages to construction sites every Monday. This raises their interest in the sites and fosters greater unity among the entire team, including administrative departments. At the same time, the regional office's Safety Management Section is sending Safety Alerts that inform workers of potential onsite hazards identified from the weekly construction schedule as a way to encourage the sharing of information and realize a greater alertness to danger among all employees.

Through these daily initiatives, we aim to foster an organization-wide safety culture by facilitating communication and building trust.



*Komachi Tsuushin* messages sent through social media



## Topics

### Training for Young Employees

As a leading company for repair and reinforcement work, we position human resource development, particularly the development of young employees and passing down of skills, as an important issue.

We are focusing on developing young engineers by leveraging the experience of senior employees in construction, sales, and engineering departments to implement experience-based training programs. Content includes operational methods used at construction sites and ways to solve technical issues. We are also actively working to further advance this training by incorporating environmental improvements (including DX).



An experience-based training session

## Expressways

### Large-scale Expressway Renewal and Repair Project

There are many structures that have been in use for over 50 years and as they age, damage and deformities of these structures are becoming apparent. Therefore, expressway companies are launching the large-scale renewal and repair project in order to restore these structures to their original state and even enhance performance and functionality, thereby ensuring the long-term soundness of the expressways. One of the main characteristics of renewal work is that it has a large impact on society because traffic needs to be restricted and sometimes detours are set up for long sections of road during long construction periods. Also, construction on expressways in urban areas is often difficult due to restrictions such as limited working space where the expressway passes directly over a major arterial road.

### PR Representative for Expressway Renewal Work

Expressway renewal work is carried out on a section of a major transportation network so it has a considerable effect on society. Therefore, we work to gain the understanding of road and transportation administrators regarding the importance of renewal work, and request their cooperation with publicity activities aimed at regular road users, including by posting notices of construction work on electric signs and distributing leaflets. We also open sections of our construction sites to visitors such as the press and educational institutions in order to communicate the current status of social infrastructure to wider society and promote the importance of renewal work.

### Passing on Social Infrastructure to Next Generation

Due to the social importance of expressways, carrying out construction work while they are in operation involves various restrictions, including in terms of safety and scheduling.

Advancing construction on a structure involves a wide range of different organizations, such as the organizations managing the roads leading in and out the section of road and other roads that run alongside it. Coordinating all these organizations requires a great deal of time. Despite these difficult conditions, once work has been safely completed and the structure is in sound condition for use, it becomes social infrastructure that can be passed on to next generation, which is enormously satisfying.



Renewal work underway

## Local Governments

### Overview of Construction Works for Local Governments – The Repair of Mino Bridge as a Case Study

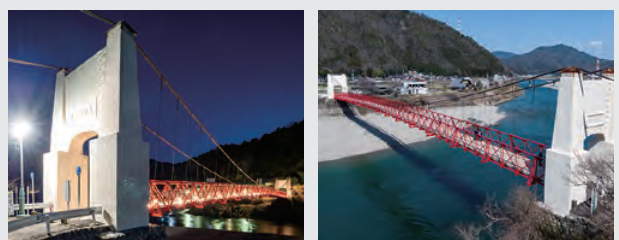
There are approximately 730,000 bridges in Japan and about 90% of these are managed by local governments. Mino Bridge is a 116-meter-long steel stiffened suspension bridge which crosses the Nagara River in Mino City, Gifu Prefecture. It started service in 1916, giving it significant historical and technological value as Japan's oldest modern suspension bridge. We were able to participate in the repair of the valuable bridge. Although the contract for this project was with Mino City, as the bridge is an Important Cultural Property, construction was carried out under designs and supervision by the Japan Cultural Heritage Consultancy, a design company entrusted with the project by the Agency for Cultural Affairs.

### Unravelling the History

This project was the first large-scale repair work carried out on Mino Bridge since its designation as an Important Cultural Property. When checking the specifications of the steel parts, one of the main themes of the Japan Cultural Heritage Consultancy's work was checking the roots and repair history of each member of the structure. We actively contributed to these investigations. The investigation was a success, with the results revealing that the initial steel members that are still in use today were manufactured at the Imperial Steel Works in Yawata.

### Receiving Double Awards

As an Important Cultural Property, the bridge needed to be repaired without any changes to its original form under the Act on the Protection of Cultural Properties. Therefore, during the work we had to be extremely careful, keeping records of the position of every member that was removed and the diameter of each rivet, as well as carefully sorting the separated members by type and organizing them in a way that made it clear where and how it should be reattached. This required a large amount of time and manpower, but we were able to repair and restore the bridge without losing any of its value as a cultural property. As a result, the Group received double awards for the first time in our history, the Japan Society of Civil Engineers' 2021 Tanaka Award (Renovation Category) and a 2021 Japan Construction Engineers' Association Award.



Mino Bridge (Photos: Japan Cultural Heritage Consultancy)

## Ministry of Land, Infrastructure, Transport and Tourism

### ■ Measures for Building National Resilience

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) is carrying out many projects under its Fundamental Plan for National Resilience, including measures to tackle aging infrastructure and strengthen seismic functions. We are engaging in these projects, primarily for seismic strengthening work. We are focusing on tackling these projects not only from a technical perspective, but also by raising efficiency and productivity through the introduction of construction DX. We are actively incorporating measures for improvement of construction industry advocated by MLIT, and in FY2022, we were evaluated highly by the ministry and designated as a company of excellence in construction by its several regional offices.

### ■ Maintaining and Managing Structures through Cooperation with Bridge Doctors

In order to extend the service life of highway bridges, MLIT has established the Bridge Doctor system, which aims to apply technical guidance and advice from experienced academic experts to infrastructure maintenance. We helped this initiative by the attachment of sensors that continually monitor the damage situation of a bridge and initial data collection. We are also participating in social infrastructure maintenance and management projects operated through industrial-governmental-academic partnerships.



An inspection by a Bridge Doctor

### ■ The Difficulty of Construction Work On What is Already There

Seismic strengthening work involves attaching aseismic devices using anchor bolts, so there is a risk that boring will damage important members within a structure. There are many instances when construction cannot go forward according to the original contracted plans because the interior of the existing structure is not visible. As a company specializing in maintenance, coming together and leveraging our ingenuity to overcome successive problems like these is worthwhile work. In FY2022, we received several awards from regional offices of MLIT due to our efforts in this area.

## Private Sector and Others

### ■ Work on Private Sector Structures

We provide a one-stop service that delivers solutions to issues such as damage to harbor facilities and buildings caused by aging, revisions to laws and regulations, damage from natural disasters, and changes to a structure's purpose. This service covers everything from investigations and diagnoses to design and construction work. In our construction efforts, we have raised the value and extended the service life of the buildings we have worked on by making them safe, secure, comfortable, and resilient to disasters. We have also contributed to conserving Japan's beautiful cultural heritage by participating in the renovation of historic buildings.

### ■ Valuing Relationships of Trust with Customers

We take a wide-ranging approach to the private sector customers of our group companies and other partner companies, and if any issues arise, we go to the site to survey the actual situation and offer a variety of solution proposals. By building in-person relationships with customers in this way, we are able to detect any issues at an early stage, contributing to extending the service life of facilities. The relationships of trust we build with our customers are long-lasting, including providing maintenance and operational management support after renewal work has been completed.

### ■ Combining Construction with Service

A large proportion of renovation works are carried out while a facility is still in use, so we take a customer-first approach. Compared to new construction, renewal work requires that more attention is paid to curtailing public nuisances, such as vibrations and noise, and controlling waste emissions, and there are many other challenges, including a tendency toward longer construction schedules.

Despite such difficulty, we work closely with our customers to ensure that construction moves forward without issue and that we can safely hand over the completed structure. Seeing our customers using their renovated buildings brings us the greatest joy.



Reinforcement work in progress

# Manufacturing and Sales of Construction Materials SHO-BOND MATERIAL CO., LTD.



We are contributing to maintaining and updating social infrastructure by supplying products with excellent performance in relation to cost that can meet customers' needs and earn their trust. We work to build frameworks for safe and efficient production activities, highly reliable quality assurance activities and the accurate supply (delivery) of products.

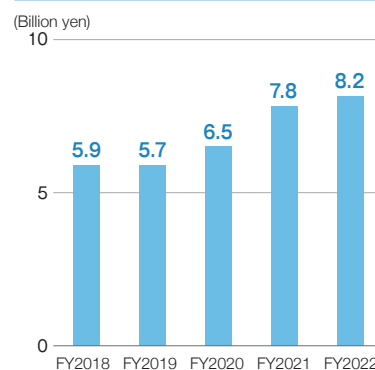
## Shigeru Naraoka

President and Representative Director  
SHO-BOND MATERIAL CO., LTD.

## Overview of SHO-BOND MATERIAL CO., LTD.

SHO-BOND MATERIAL CO., LTD. is a core Group company that engages in the manufacturing and sales of construction materials. We were established in July 2016 through the merger of SHO-BOND Chemical and SHO-BOND Coupling to become both a manufacturer and seller of resin products, construction materials, and pipe joints. We produce new construction materials and methods that accurately respond to changes in the maintenance market and the needs of our customers by combining chemical and civil engineering technologies within a comprehensive framework spanning from design and development through to manufacturing and sales. The product improvement and new construction method ideas we gain from hundreds of SHO-BOND CORPORATION construction sites across Japan are the driving force behind our product development capabilities. We continuously evolve our resin products and construction materials alongside construction sites and boast a broad lineup of products tailored for the various effects of deterioration and damage that afflict structures.

## Group Product Sales



## Activity Report

### 1 Diversifying Product Sales Methods

In February 2022, we independently acquired a construction license in order to expand sales of new products and meets customer requests that we carry out work onsite. This has enabled us to take on construction service contracts so that we have been accepting construction orders that incorporate sales of our products. In particular, we had been having trouble growing sales of CPJ-L, a concrete with a low-elasticity latex and ability to harden very quickly that we added to our lineup in October 2020, as it was difficult to meet customer needs through just product sales. However, being able to mix and apply the product onsite ourselves using a specialized mixer has led to a large increase in sale volumes. Furthermore, we are also able to leverage our advantage of selling adhesives for pouring concrete to construction joints. Going forward, we will develop sales of products paired with onsite construction across Japan.



Construction site (CPJ-L)

### 2 Stainless Steel Mechanical Pipe Joints (Straub Pipe Couplings)

We have been manufacturing and selling Straub couplings for 40 years, from 1982 to 2022, as mechanical pipe joints for air conditioning and sanitary equipment piping. Over this period, we have developed lightweight, improved fastening, high pressure-resistant, and other products in response to numerous requests from our customers. These have greatly pleased workers and clients on actual construction sites by saving labor and shortening construction schedules. We will continue striving to meet the expectations of our customers.

As a measure to grow sales in new fields, we have jointly developed a fire-resistant coupling for flammable gas pipes with the Japan Gas Association and five gas companies, and this is now being launched to market. The product has been highly evaluated by gas-related work sites and has received the Japan Gas Association's 2022 Award for Engineering in recognition of its excellent workability. Also, our couplings are made from stainless steel, giving them long service lives and semi-permanent recyclability. This contributes to lowering environmental impact, including reduction of industrial waste and CO<sub>2</sub> emissions.



Example of a Straub pipe coupling (Straub Grip G-type)

# Overseas Businesses SHO-BOND & MIT Infrastructure Maintenance Corporation

SHO-BOND & MIT Infrastructure Maintenance Corporation (SB&M) combines SHO-BOND's technological capabilities with the network and business development capabilities of MITSUI & CO., LTD. (Mitsui) to provide solutions using SHO-BOND's technology for infrastructure and private facilities owned and managed by customers in Japan and overseas. The company builds and develops new business foundations for the SHO-BOND Group and promotes activities that create a safe and secure social environment.

## Overview of SB&M

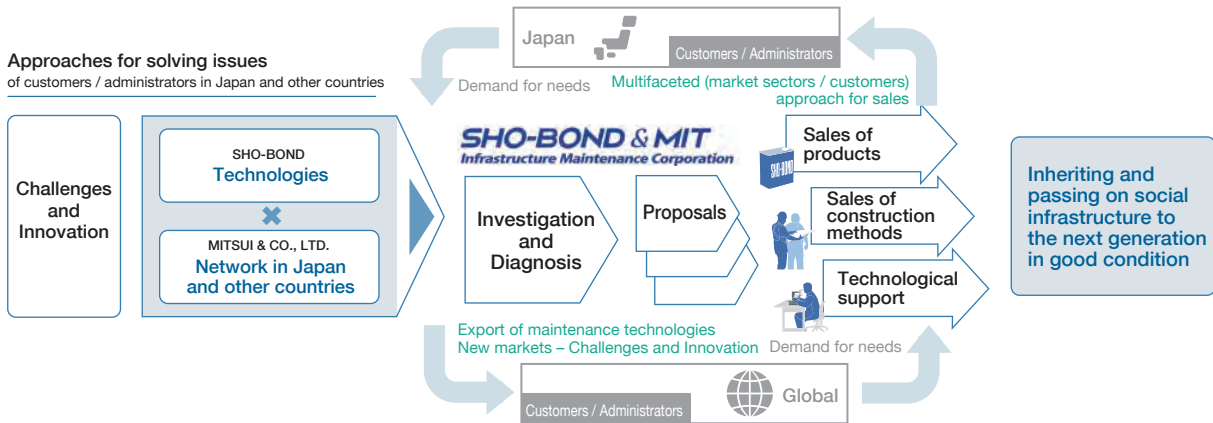
SB&M was established in April 2019 with a 51% investment by SHO-BOND Holdings Co., Ltd. and a 49% investment by MITSUI & CO., LTD. It is the first joint venture company in the history of SHO-BOND. A total of nine employees seconded from both companies work together to develop new businesses in cooperation with SHO-BOND Group companies and Mitsui. The company's business represents a new challenge for the SHO-BOND Group. We are working to create new business areas both in Japan and overseas.

In November 2020, the company established a joint venture company (CPAC SB&M Lifetime Solution Co., Ltd.) with the Concrete Products and Aggregate Co., Ltd. (CPAC), a subsidiary of the Siam Cement Group (SCG), a major conglomerate in Thailand, to develop infrastructure maintenance business in Southeast Asian countries starting from Thailand.

SB&M is working to expand sales of products and construction methods, listening to structural maintenance issues of customers in Japan and overseas and taking a problem-solving approach. Based on SHO-BOND's technology, the company handles a wide range of products, including structural repair resin, earthquake-resistant equipment and expansion equipment for bridges, and various pipe joints. It also introduces high-quality repair products from overseas into Japan.

At the Thai joint venture company, two seconded employees are currently playing a leading role to transfer SHO-BOND's technology. Thailand is experiencing a stage where aging infrastructure issues are beginning to surface. We are conducting educational activities to raise maintenance awareness and sales activities to show maintenance benefits from the perspective of life cycle costs. SB&M cooperates with SHO-BOND Group companies to support local businesses.

The company is also considering the development of new overseas businesses to contribute to other countries by exporting the technologies and knowledge it has cultivated and gained in Japan.



## Activity Report

### Taking Advantage of the Joint Venture's Strengths to Move Forward Despite the COVID-19 Pandemic

In FY2022, SHO-BOND and Mitsui, as well as SB&M and CPAC, worked together both in Japan and overseas to advance business while leveraging their respective strengths.

Travel and behavioral restrictions during the protracted COVID-19 pandemic significantly impacted our Thai and other overseas businesses. Even seconded employees of the Thai joint venture company could not visit sites or customers. However, we utilized web meetings connecting multiple locations and developed sales operations by exchanging ideas between local and Japanese employees. We also secured repair projects for ports and cement factories with the support of the sales network of SCG, CPAC, and MITSUI & CO. (THAILAND) LTD.

Similarly, overseas business development in countries other than Thailand has made steady progress through the Web, taking advantage of Mitsui's overseas network of offices in 62 countries worldwide.

While overseas businesses faced difficulties, our sales activities in Japan increased even under behavioral restrictions. We have been getting more and more positive feedback by responding flexibly to customers' needs, for example, by conducting online sales to new customers through Mitsui's network and repeating site visits to lead up to mockup (trial construction) and product sales.

SB&M will continue to make steady progress toward business growth by leveraging the strengths of a joint venture and combining the capabilities of the Group and its partner companies.



Scenes of operations in Thailand



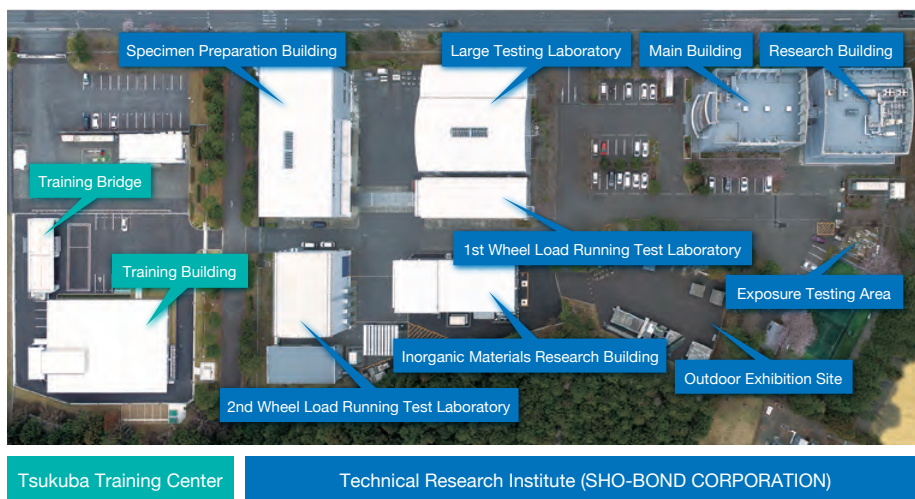
A port repair site in Thailand

# Research and Development Technical Research Institute

As a leading company in the structure maintenance business, we are contributing to realizing a safe society through our advanced technological development capabilities. Our development themes are based on the diverse needs of customers in various fields and our construction sites. In cooperation with public and private research institutes, we use open innovation research and development methods to enhance the results and speed up the process.

## Overview of Technical Research Institute

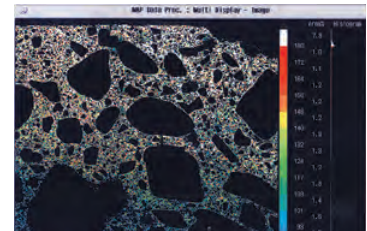
The SHO-BOND Group has contributed to society through the research and development of its own repair technology, believing that the combination of chemical and civil engineering technologies is important for effective infrastructure maintenance. Technical Research Institute played a central role in this effort. In 1996, the year after the Great Hanshin-Awaji Earthquake, SHO-BOND opened its third research laboratory (with a site area of approximately 22,000 m<sup>2</sup>) in Tsukuba Science City. We named the institute the Technical Research Institute based on the philosophy of raising repair skills to the level of scientific research. The institute focuses on clarifying the mechanisms of structural deterioration and damage, improving fatigue durability against large vehicles, and researching and developing effective reinforcement technology for earthquake disasters. The research facility specializing in the repair and reinforcement of structures and equipped with a lot of state-of-the-art equipment is unique in Japan, and many materials and construction methods developed have been adopted as standards for repair methods. The research staff consists of researchers with backgrounds in chemistry (organic materials) and civil engineering (inorganic materials and structures).



Aerial view of the Technical Research Institute and Tsukuba Training Center



Wheel load running test



Example of EPMA analysis

## Various Research and Development Themes

In recent years, we have been working on the following research and development themes:

- Concrete coating methods with few work processes that can be easily conducted by non-skilled workers, and one-pack type coating materials that are easy to handle
- A method to ensure that anticorrosive agents for reinforcing bars penetrate from the surface of the concrete to the interior as a preventive maintenance to be applied before the deterioration of structures
- Special anchors for adhesive injection and special concrete placing systems for the surface replacement to repair deck slabs that have deteriorated significantly due to repeated heavy traffic loading

In addition to these themes, we are constantly conducting research and development on several other themes.

In February 2022, the Institute received the Special Award at the First Infrastructure Maintenance Awards from the Japan Society of Civil Engineers (JSCE) for its longstanding research and development activities that have contributed to the development of infrastructure maintenance.



CPJ-L demo attended by customers



Bending test of deck slabs repaired by resin injection



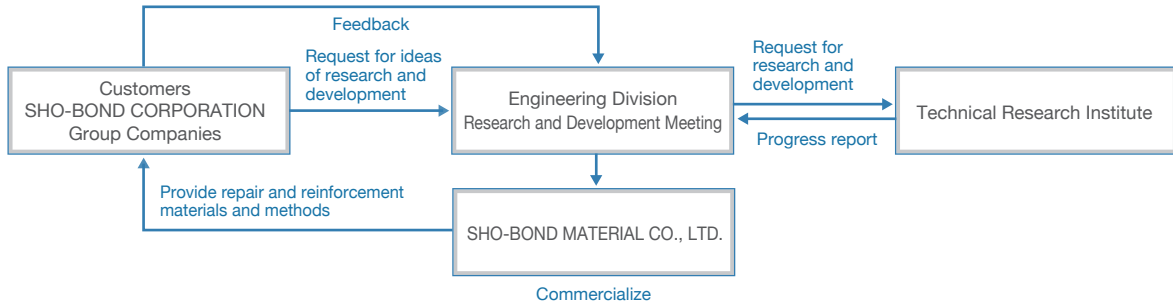
Received the Special Award at the First Infrastructure Maintenance Awards from JSCE

 [JSCE Infrastructure Maintenance Awards website \(Japanese version only\)](https://inframaintenance.jsce.or.jp/hyousyou/announcement1/)  
<https://inframaintenance.jsce.or.jp/hyousyou/announcement1/>



## Cooperation Among Divisions and Group Companies

Led by the Engineering Division, which gathers information on issues faced by customers and the Group, the Group conducts research and development at the Technical Research Institute and commercializes products at SHO-BOND MATERIAL CO., LTD.



## Development Examples

### 1 A High-performance Anti-falling Method with Excellent Transparency (SHO-BOND New Clear Cloth Method)

With the aging of infrastructure constructed during the period of high economic growth, concrete pieces falling from elevated bridges and other structures have become apparent, and anti-falling measures have been implemented. In addition, since the Sasago Tunnel Ceiling Collapse, inspections have become mandatory every five years, and facility managers are required to conduct a close visual inspection. For this reason, there is a need for a method that allows direct visual inspection of concrete conditions even after anti-falling measures are implemented, but the transparency has been insufficient with existing methods.

To meet this demand, we have developed a high-performance anti-falling method that is transparent and has excellent visibility of the substrate. The method combines excellent transparency with load-bearing performance and deformation performance to support falling objects and demonstrates sufficient performance even in the temperature range of -30 to 50°C. We expect this method will contribute to the maintenance and management of concrete structures and the prevention of third-party damage.

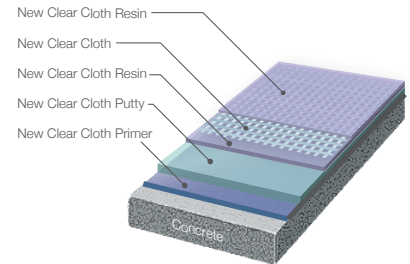


Illustration of SHO-BOND New Clear Cloth Method



Before construction



After construction

### 2 Life Extension Methods for Small and Medium-sized Bridges (CPJ-L, SBJT, and SB Primer)

Small and medium-sized bridges are important infrastructure for community roads regardless of their traffic volume. However, they are often managed by local governments lacking both financial and human resources, requiring general-purpose construction equipment, workability, and economic efficiency. To meet these needs, we have developed life extension methods that satisfy these requirements and provide sufficient durability. This method involves removing the existing pavement from the concrete deck slab, applying a highly permeable primer (SB Primer) and an adhesive for jointing (SBJT) to the top surface of the concrete deck slab, and then placing paving and reinforcement material, a low-elasticity latex modified fast curing concrete (CPJ-L) mixed with a small mixer. The main material, CPJ-L, has various features, such as fast curing that leads to a shorter road closure time, durability, and load resistance. We expect it to become an effective tool for local governments to promote longer bridge life.

### 3 AI-based Repair Design Productivity Improvement System (AI Shindanshi\*)

Traditionally, causes of deterioration of concrete structures have been identified based on detailed site investigation and material analysis results of samples taken from deteriorated parts. In addition, the repair method had to be selected from various choices corresponding to the identified causes of deterioration according to site conditions.

As a tool to improve the productivity of this process, we have developed an artificial intelligence (AI) system for diagnosing deterioration and selecting repair methods (AI Shindanshi). The basic system is constructed by deep learning by AI based on abundant in-house repair work examples. The system enables the identification of deterioration factors and the immediate proposal of optimal repair methods simply by providing deterioration images and location information of the target structure. We plan to utilize "AI Shindanshi" as a tool for making technical proposals in planning for extending the life of structures of customers and other activities to contribute to improving business efficiency.

\*AI Shindanshi ("AI診断士") is a registered trademark of SHO-BOND CORPORATION in Japan as of March 2023.

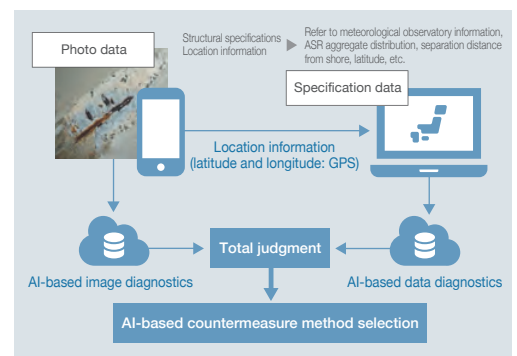


Diagram of AI diagnosis

# Tsukuba Training Center

## Motivation for Establishment

### Providing Learning Opportunities Based on Practical Training

Recently, a wide variety of structural repair methods, including preventive maintenance, anti-deterioration, seismic reinforcement, and component replacement methods have been developed. Materials have also become diverse, including concrete, steel, resin materials, and new materials such as aramid and carbon fiber. Familiarity with these methods and materials is essential to ensure construction quality. In addition, the Group's abundant proprietary methods and materials are valuable assets, and we consider it an important task to ensure that these technologies are passed on to the next generation. In order for all employees to master these technologies, we decided that a full-scale training center would be necessary because the existing classroom lectures and on-the-job training at construction sites were insufficient. For these reasons, in October 2021 we established the Tsukuba Training Center with an area of approximately 5,000m<sup>2</sup> near the Technical Research Institute.



Full view of Tsukuba Training Center

## Concept of the Facilities

The concept of the facilities is to provide classroom lectures on the intention of adopting each construction method and material, points to note in construction, safety, and others, and then to provide practical training during the training period to consolidate the knowledge. With an eye on training not only for our employees but also for employees of domestic and overseas partner companies that have little experience in repair work, we use the same repair objects and materials in the practical training as those at the construction site so that they can experience the feeling of the site. The main facilities are a seminar room, a construction training room, a safety training room (with a real scaffold, mannequins, danger experience equipment, and VR danger experience equipment), and a full-scale training bridge (a two-span simply supported three I-girder bridge).



Training bridge

## Overview of the Facilities

### Training building (total floor space of approx. 1,000m<sup>2</sup>)

- Seminar room: A classroom for up to 54 participants
- Construction training room: A seminar room where participants can learn how to handle repair materials
- Safety training room: A seminar room where participants can experience the significance of safety activities

### Training bridge (10m x 20m)



Hanging experience of a safety belt



Classroom seminar



Morning meeting practice



Practical training in applying organic materials



Practical training in installing bridge fall prevention equipment (at the training bridge)



Practical training in finding rebars location

## Overview of Maintenance Technology Inc.

Maintenance Technology Inc., established in 2011, is the only company in the Group engaging in construction consulting services. As of July 2022, the company has 23 employees and three sales offices: Tokyo, Nagoya, and Osaka. The breakdown of the company's operations is 75% consulting services and 25% operations within the Group. The consulting services include investigation, diagnosis, analysis, and repair design of bridges, tunnels, and other public structures. The operations within the Group mainly include a shape measurement of structures using 3D scanners, a photographic measurement using digital cameras, and an analysis of SHO-BOND resin products.



Site investigation

## Introduction of Operations

The following are two representative operations of Maintenance Technology Inc.

### 1 Structure Measurement and 3D-CAD Data Preparation Using 3D Scanners

Repair and reinforcement work consists primarily of installing or replacing members on existing structures. For this reason, accurate measurement is often difficult when existing structures have complex shapes or narrow spaces. In response to this problem, Maintenance Technology Inc. has begun using a recently developed high-performance 3D scanner device to measure the dimensional relationships of existing structures accurately, safely, and quickly. We also convert the point cloud data obtained from 3D scanners into 3D-CAD data to check the degree of interference between members and the scope of construction.



Structure measurement using a 3D scanner

### 2 Photographic Measurement Using Digital Cameras

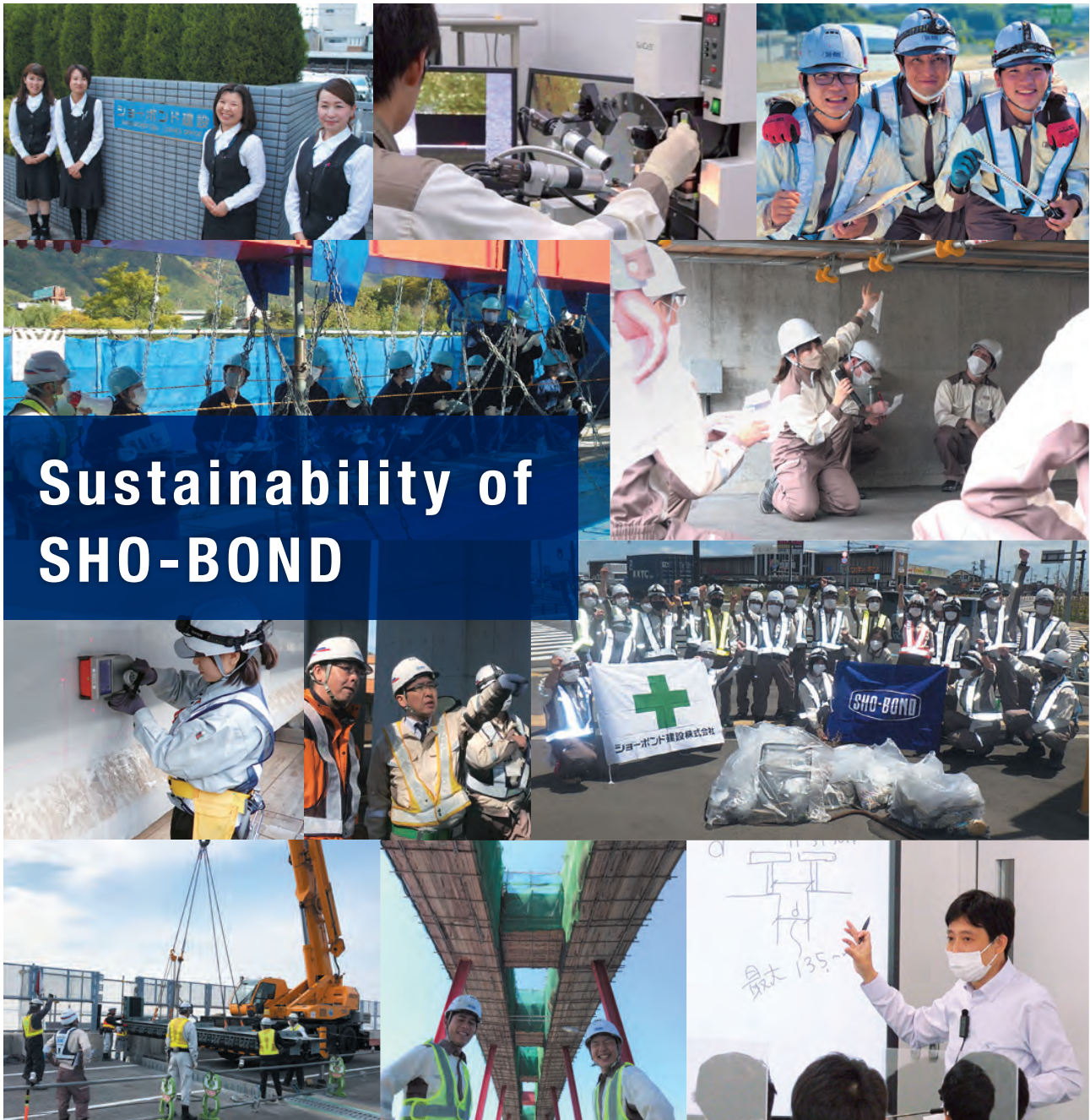
As the scale of construction projects increases, it is difficult to ensure measurement accuracy using the conventional method of manually measuring the drilling position of concrete. Accordingly, we calculate 2D and 3D coordinate positions using photographic measurement technology with a digital camera to accurately determine the coordinate positions to be found, such as the drilling position of concrete. Based on the measurement results, members are manufactured in factories.



Photographic measurement



The above two measurement operations involve technologies for accurately measuring existing structures, which are very important for repair and reinforcement work. We will stay up-to-date with the latest trends in new technologies, and contribute to improving the construction quality on sites.



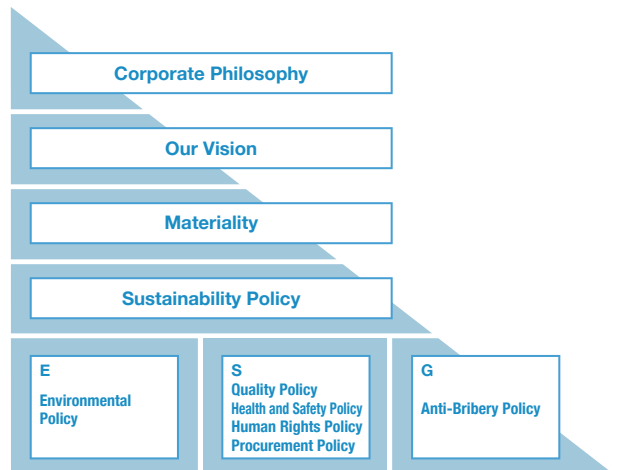
# Sustainability of SHO-BOND

## Basic Concept for Sustainability

With its Corporate Philosophy at the core of management, the Group has designated material issues (Materialities) to get close to its vision. Four designated Materialities involve internal activities and how business activities affect society. We believe that all of these activities are sustainability management that contributes to accomplishing the SDGs and achieving our Corporate Philosophy. We have established a Sustainability Policy and ESG-related policies to provide guidelines for constant activities in accordance with materiality priorities. In August 2022, we set KPIs for each of the priorities to measure their progress and disclosed targets and results.

We will enhance our corporate value over the medium to long term and contribute to creating a sustainable society by continuing to upgrade sustainability initiatives with the input of our internal and external stakeholders. Specifically, we will improve our promotion framework, consider measures, and regularly review them to upgrade the initiatives.

## Sustainability Philosophy










## Strengthening Our Sustainability Promotion Framework

The Group has established a Sustainability Committee, chaired by President and Representative Director and composed of all inside and outside directors. The Committee meets once a year as a general rule to discuss and decide on sustainability issues including social and environmental issues. The Committee also submits and reports the results of discussion on important matters to the Executive Committee and the Board of Directors. The Committee mainly discusses general important matters related to sustainability such as the development of policies and measures related to sustainability, the identification, assessment, and management of climate-related risks and opportunities, and the management of KPIs for non-financial information.

We have also established an ESG Promotion Office as an office to integrate activities related to sustainability. The ESG Promotion Office holds meetings as necessary with those charged with ESG in respective departments and at Group companies to work together at the practical level across the Group. Under such a structure, we are committed to staying and becoming more sustainable by organically cooperating among the management team, the ESG Promotion Office, respective departments, and Group companies.

## KPIs Related to Sustainability

Materiality	KPIs		FY2022
<b>Contribution to the development of sustainable cities</b>  	<ul style="list-style-type: none"> <li>Number of violations of environmental laws and regulations</li> </ul>	0	0
	<ul style="list-style-type: none"> <li>Rate of reduction in CO<sub>2</sub> emissions intensity*<sup>1</sup> (Scope 1 and 2)<sup>*2</sup> (vs. FY2022 [6.5 t-CO<sub>2</sub> / 100 million yen])</li> </ul>	-25% [4.9 t-CO <sub>2</sub> / 100 million yen]	±0% [6.5 t-CO <sub>2</sub> / 100 million yen]
<b>Comprehensive maintenance system backed by the organizational capabilities</b>  	<ul style="list-style-type: none"> <li>Average scores for contractor performance evaluation in construction industry</li> </ul>	MLIT: 78 or higher NEXCO: 80 or higher	MLIT: 80.0 NEXCO: 86.0
	<ul style="list-style-type: none"> <li>Percentage of construction sites where "8 days off in 4 weeks" is achieved<sup>*3</sup> (according to the Japan Federation of Construction Contractors)</li> </ul>	100%	85.9%
	<ul style="list-style-type: none"> <li>Number of fatal accidents</li> </ul>	0	0
<b>Productivity improvement through technology development</b>  	<ul style="list-style-type: none"> <li>Lost Time Injury (LTI) frequency rate</li> </ul>	0.7 or lower	0.67
	<ul style="list-style-type: none"> <li>Achievement rate of annual overtime limit of 720 hours<sup>*4</sup></li> </ul>	100%	100%
	<ul style="list-style-type: none"> <li>Percentage of female employees in regular recruiting</li> </ul>	15% or more	9.5%
	<ul style="list-style-type: none"> <li>Percentage of employees with disabilities</li> </ul>	2.4% or more	3.3%
<b>Sound governance and measures for more improvements</b> 	<ul style="list-style-type: none"> <li>Rate of response to safety confirmation</li> </ul>	100%	100%
	<ul style="list-style-type: none"> <li>Compliance training participation rate</li> </ul>	100%	98.8%
	<ul style="list-style-type: none"> <li>Number of serious violations of laws and regulations</li> </ul>	0	0
	<ul style="list-style-type: none"> <li>Information security training participation rate</li> </ul>	100%	90.3%

\*1 CO<sub>2</sub> emissions per consolidated net sales (100 million yen)  
 When to achieve: \*2 FY2031; \*3 FY2024; \*4 FY2024

# Efforts for Environment

## Climate-related Financial Disclosure Based on the TCFD Recommendations

The SHO-BOND Group (the "Group") expressed its support for the TCFD recommendations and joined the TCFD Consortium in July 2022. Based on its corporate philosophy of "Inheriting and passing on social infrastructure to the next generation in good condition," the Group is committed to "contribution to the development of sustainable cities" as one of its Materialities and is aware that combatting climate change is an important management challenge.



Based on the recognition that a longer service life of infrastructure contributes to reducing greenhouse gas emissions, we will make efforts so that we can contribute to realizing a sustainable society. These efforts include information disclosure and other initiatives related to climate change, in addition to core business activities as an infrastructure maintenance specialist.

### Strategy

The Group conducted a scenario analysis to identify and assess the impact on its overall business management of the risks and opportunities associated with the "transition" to a low-carbon economy and those associated with the "physical" changes brought about by climate change.

As assumptions for the scenario analysis, we selected the 2°C or lower and 4°C scenarios by referring to several existing scenarios published by the International Energy Agency (IEA), the Intergovernmental Panel on Climate Change (IPCC), and other organizations. Businesses subject to the analysis are the domestic construction business and the manufacturing and sales business of repair and reinforcement materials; the time horizon is assumed to be up to the year 2030. For the climate-related risks and opportunities identified, we have sorted out necessary countermeasures as shown in the table below.

By implementing the countermeasures identified in this report, we will contribute to developing sustainable cities and will achieve sustainable growth by enhancing the resilience of our business.

Risks / Opportunities covered			Countermeasures
Changes expected	Description		
Changes in reputation among shareholders and investors	Opportunity	<ul style="list-style-type: none"> <li>Increased ESG investment in the SHO-BOND Group as an infrastructure maintenance specialist due to being highly regarded for its low CO<sub>2</sub> emissions</li> </ul>	<ul style="list-style-type: none"> <li>Disclose information about CO<sub>2</sub> emissions (Scope 1, 2, and 3) and initiatives aimed at reducing CO<sub>2</sub> emissions intensity* (Scope 1 and 2)</li> </ul>
Introduction of carbon pricing	Risks	<ul style="list-style-type: none"> <li>Increased procurement costs for energy and materials</li> <li>Decreased transactions due to our inability to adequately respond to customers' requests for reducing CO<sub>2</sub> emissions</li> <li>Surges in the purchase prices of resin-based materials and steel materials as a result of decreased production of naphtha and iron ore</li> <li>Increased demand for watershed flood control and disaster restoration work, rather than seismic reinforcement work and service life extension work, in the face of growing severity of weather disasters</li> </ul>	<ul style="list-style-type: none"> <li>Promote green procurement, including switching to low-carbon materials</li> <li>Switch to renewable energy and promote energy conservation during construction</li> <li>Invest in solar power generation for own consumption, etc.</li> <li>Develop low-carbon and decarbonization technologies</li> <li>Develop new technologies that support the preventive maintenance of infrastructure</li> </ul>
Introduction of more aggressive targets / policies for CO <sub>2</sub> emissions reduction by countries around the world		<ul style="list-style-type: none"> <li>Increased price competitiveness with the delivery of low-carbon construction services and products in the field of repair and reinforcement</li> <li>Due to CO<sub>2</sub> emissions regulations, the number of life-extending works of buildings and infrastructures increases while the amount of overall investments in construction decreases</li> <li>Increased demand for infrastructure maintenance to counter natural disasters</li> </ul>	
Changes in customer behaviors	Opportunities		
Rises in raw materials costs			
Acceleration of national resilience measures			
Increase in average temperature	Risks	<ul style="list-style-type: none"> <li>Decreased productivity in line with increased heat stroke cases among on-site workers</li> <li>Increased costs for improving working environment and introducing equipment, etc. to prevent heat stroke</li> <li>Worsening worker shortages due to deteriorating outdoor working conditions</li> </ul>	<ul style="list-style-type: none"> <li>Develop technologies for improving on-site working environments and implement heat stroke countermeasures</li> </ul>
Growing severity of weather disasters	Risks	<ul style="list-style-type: none"> <li>Increased costs due to process delays at disaster-stricken sites</li> <li>Supply chain disruption</li> <li>Damage to or shutdown of operations at disaster-stricken own factories or contracted manufacturing plants</li> </ul>	<ul style="list-style-type: none"> <li>Work together with the entire supply chain to strengthen BCP measures in preparation for disasters</li> <li>Manage sanitation related to water in a sustainable manner</li> </ul>

\*CO<sub>2</sub> emissions per consolidated net sales (100 million yen)

## Metrics and Targets

To realize a decarbonized society—the basic principle underlying the Act on Promotion of Global Warming Countermeasures, the Group has set targets of reducing its CO<sub>2</sub> emissions intensity (Scope 1 and 2) 25% from FY2022 levels by FY2031 and ultimately achieving carbon neutrality by FY2051.


### CO<sub>2</sub> Emissions Reduction Targets

Metrics	Base year	Base year result
CO <sub>2</sub> emissions intensity (Scope 1 and 2)	FY2022	6.5 t-CO <sub>2</sub> / 100 million yen
Target year	Targets	
FY2031	-25%	
FY2051	Net zero	

### CO<sub>2</sub> Emissions (Scope 1, 2, and 3)

Category	Unit	FY2022
Scope1	t-CO <sub>2</sub>	2,667
Scope2		2,571
Total of Scope1 and 2		5,238
CO <sub>2</sub> emissions intensity	t-CO <sub>2</sub> /100 million yen	6.5
Scope3	t-CO <sub>2</sub>	110,008
Total of Scope1, 2, and 3		115,246

Coverage: Domestic group companies

 See our website below for more details.

<https://www.sho-bondhd.jp/english/csr/tcfd/>

## Managing Sanitation Related to Water in a Sustainable Manner

At construction sites of repair and reinforcement projects undertaken by the Group, we use a huge amount of water. We use water mainly for workers to break up existing concrete, spray water as a dust control measure, and wash their hands. However, we are often unable to draw water to construction sites and we need to take special control measures when discharging used water. Drawing and discharging water at construction sites are big issues. Based on this background, we place emphasis on managing sanitation related to water in a sustainable manner.

As one of initiatives to solve the issues, we started using a circulation-type hand wash station at our construction sites. This station is a system that filters the water used by workers to wash their hands. The station enables them to wash their hands with clean water at any time while saving them the time of drawing water. Maintaining sanitation at construction sites helps prevent the spread of infectious diseases and eliminate inconvenience for workers. In addition, we consider donating this circulation-type hand wash station to a nearby designated shelter or a developing country after completing construction work.

Further, we distributed high-performance and handy water purifiers to our employees to help protect them and their families when a disaster struck. This water purifier can help people ensure life-sustaining water at the time of a disaster because it can turn rainwater and muddy water into drinking water without electricity.

Through such initiatives, we will continue to help achieve the SDGs while increasing the health and safety of our employees.



Circulation-type hand wash station installed at a site



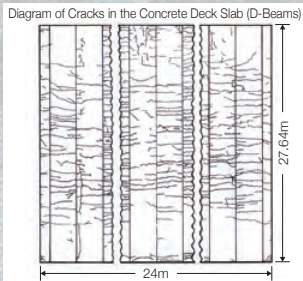
Handy water purifier

# Curbing CO<sub>2</sub> Emissions by Repair Work

We have positioned “contribution to the development of sustainable cities” as one of our Materialities, and recognizing that a longer service life of infrastructure contributes to curb CO<sub>2</sub> emissions, we have formulated an action policy for mitigating climate change through our business in a way that leverages our strengths as an infrastructure maintenance specialist. In this feature, we take a look at the restoration of the Showa Ohashi Bridge, which was a project of significance to the Group, to check what effect the restoration work had on CO<sub>2</sub> emissions. We have done this by estimating the CO<sub>2</sub> emissions volumes generated by new materials and waste in a scenario where the earthquake-damaged deck slabs were repaired and a scenario where they were disposed of and replaced.

## Overview of the Repair and Restoration Work

### Work Process ① Injecting adhesives into the cracks



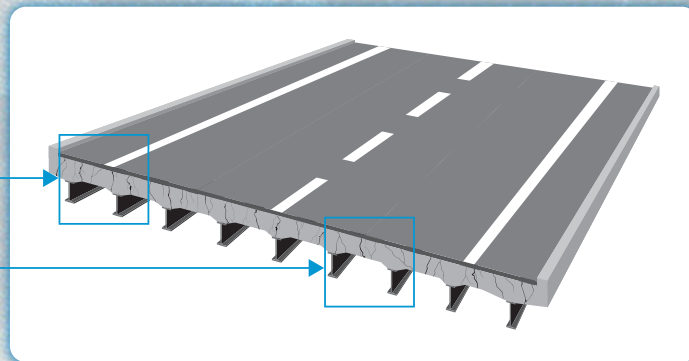
- The impact from the collapse caused hairline cracks with a combined length of 2,427 meters along five of the bridge's deck slabs



- Injection devices were set up at approximately 12,000 places (bonded using SHO-BOND #101)
- The adhesive was injected at a low pressure so that it filled up the cracks (SHO-BOND Grout SS)

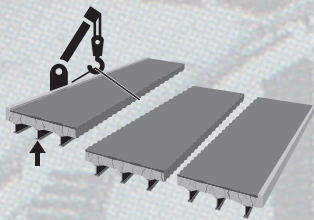
◀ The state of the cracks viewed from directly below the deck slabs

◀ Injecting grout



◀ Illustration of a collapsed bridge deck slab

### Work Process ② Dividing and joining the deck slabs



- At the time, it was not possible to lift the collapsed deck slabs using a crane, so they had to be divided into three parts and carried to land
- Crack repair (work process 1) was carried out on the divided deck slab parts



- SHO-BOND #202 was used as an adhesive to join the original concrete and new concrete

◀ Applying #202



▲ Setting up concrete forms

- Once the repaired deck slabs had been put back in place, the severed reinforcing bars were reconnected
- Formworks were set up in preparation for concrete placement to join together collapsed members that had been divided into three



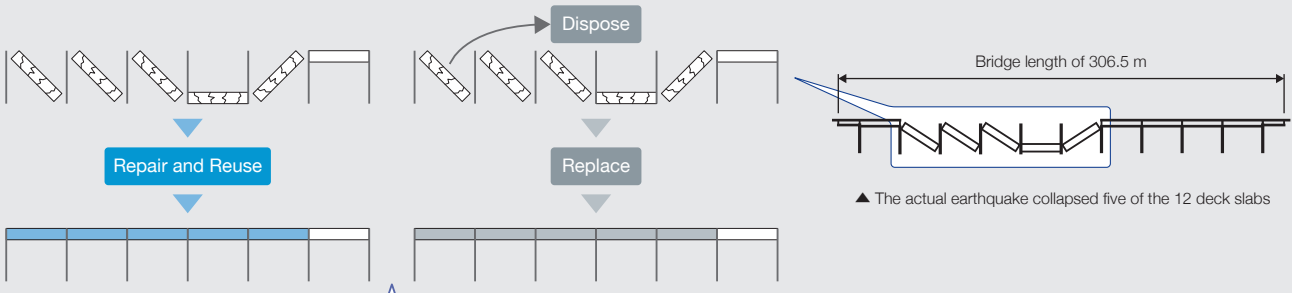
- Concrete placement and asphalt pavement

◀ Concrete placement





## Materials and Waste Volumes – Estimate Assumptions



The comparison scenarios cover the **repair** or **disposal and replacement** of five deck slabs

## Comparison of CO<sub>2</sub> Emissions

	Repair	Disposal and Replacement
<b>Volume of new materials</b> (concrete, reinforcing bars, wooden forms, adhesives, etc.)	<b>163.1t</b>	<b>2011.2t</b>
<b>CO<sub>2</sub> emissions</b> (Scope 3, Categories 1 + 5)	<b>43.7 t-CO<sub>2</sub></b>	<b>404.2 t-CO<sub>2</sub></b>

**CO<sub>2</sub> emissions higher by a factor of 9.2**

As you can see above, the estimates show that the CO<sub>2</sub> volumes (Scope 3) generated by new materials and waste in the disposal and replacement scenario was 9.2 times higher than in the scenario where the five deck slabs were repaired. When considering actual construction, in addition to CO<sub>2</sub> emissions from new materials and waste (Scope 3), you also need to factor in Scope 1 and Scope 2 emissions from sources such as construction machinery, heavy machinery, and various transportation vehicles, and it is estimated that this will make the difference even greater.

We will continue to contribute to mitigating climate change through our main business of repair and reinforcement construction.

- Notes About the Estimates
- The estimates do not take the bridge beams (steel frame) into consideration.
  - The size of the deck slabs was: a total width of 24.8m, slab width (road and pavement) of 24m, beam length of 27.54m, slab thickness of 18cm, and paving thickness of 5cm (based on documents from the time).
  - For the replacement scenario, the volume of main new materials was 1,516 tons of concrete, 380 tons of asphalt paving, 97 tons of reinforcing bars, and 18 tons of wooden formworks.
  - For the repair scenario, the volume of main new materials was 117 tons of concrete, 35 tons of asphalt paving, 9 tons of reinforcing bars, 2 tons of wooden formworks, and 1 ton of adhesive materials.
  - For the replacement scenario, the volume of waste was estimated as the volume of the replaced deck slabs.
  - The estimates do not include the materials' packaging, etc.
  - The volume of reinforcing bars, etc., found in the deck slabs have been estimated using specifications from 1964.
  - In order to make a fair comparison with repair work carried out in 1964, the volume of materials used for new construction has been estimated based on construction methods used at the time.
  - The CO<sub>2</sub> emission factors used in the estimates are derived from the databases of the Ministry of the Environment and various other sources.
  - Emissions from the processes of recovering and reinstalling the collapsed deck slabs are deemed to be roughly equal for both scenarios and have therefore been omitted from the estimates.

# Efforts to Develop Talent and Improve the Workplace Environment

## Talent Development

Employees are the most valuable asset of the Group. To play a role in the creation of a sustainable society, we must have a workforce with highly advanced skills along with environments that allow these people to fully utilize this knowledge.

Experience is a critical component of repair and reinforcement construction activities. For this reason, on-the-job training is a key element of measures to develop employees' skills. Young people are assigned responsible tasks. This process gives these people the ability to solve problems on their own in business activities.

Employees are given the opportunity to acquire know-how and technologies that match each stage of their advancement at the Group. People progress to the next level in a well-planned and effective manner. We develop the skills of everyone at the Group from a long-term perspective.

	General staff	Junior managers	Middle managers	Senior managers	Executive officers
Rank-specific training Job-specific training	Training for new employees		Training for managers		
	Follow-up training				
	Training outside the group				
	Training for marketing and sales staff				
	Training for construction staff				
	Training for engineers				
	Safety training				
OUT	<ul style="list-style-type: none"> <li>Interviewing system</li> <li>Skill and performance evaluation system</li> <li>Self-declaration system</li> <li>Job rotation</li> </ul>				
Self-development	<ul style="list-style-type: none"> <li>Supporting for getting public qualifications</li> <li>Introducing correspondence courses</li> <li>Recommending reference books</li> <li>Other</li> </ul>		<ul style="list-style-type: none"> <li>Introducing correspondence courses</li> <li>Recommending reference books</li> <li>Other</li> </ul>		

## Training for New Employees

Training for new employees is designed as a first phase to let them acquire know-how essential for working at the Group and develop them to become the core workforce. This one-year training consists of introductory training provided mainly in the form of classroom lectures and practical training provided at workplaces to which new employees are temporarily assigned.

### [Introductory training]

The main purposes of the 45-day introductory training that new employees immediately enter are to (1) let them become aware of being a member of a company, (2) let them acquire basic knowledge about their jobs, and (3) foster a sense of solidarity among them as an employee of the SHO-BOND Group.

Many of newly hired graduates majored in civil engineering and construction at college or university, but most of them learn the maintenance field for their first time. We design training programs in a way that allows them to acquire fundamental knowledge until they enter the practical training.

### [Practical training]

The practical training accounts for the majority of the one-year training for new employees. This practical training is an important process for new employees to put the knowledge they have acquired during the introductory training into practice under the direction of senior employees.

We believe that the fundamentals of any kind of job at the Group lie at work sites, no matter what careers new employees will choose in the future. This is why the practical training is basically provided in work sites where new employees learn repair and reinforcement construction activities.



Technical training at the Technical Research Institute



New employee learning on-site practices from a senior employee who has entered his sixth year of working at the Group

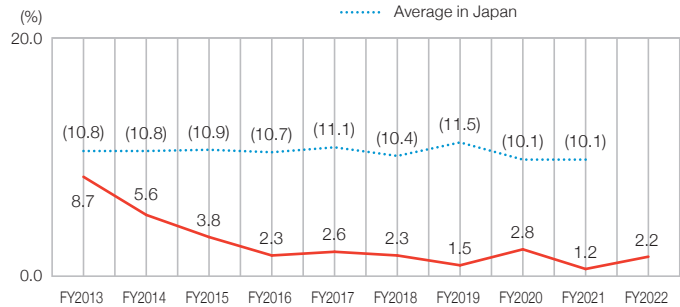
## Creating Employee-friendly Workplaces

Group companies exercise care to ensure that their people can stay in company for a long time, doing their jobs with confidence and good health. Workplaces are structured to enable people to develop and take full advantage of their skills.

We started to maintain proper working hours earlier than most companies. Thanks to this effort, our employees' awareness has improved significantly and their working hours have accordingly become proper around the time when work style reforms have progressed at other companies. Our turnover remains low at present.

We keep a high employee retention rate by continuing to improve workplace environments based on employees' needs about child-rearing, nursing care, transfers to different locations, and other employment matters.

### Changes in Turnover



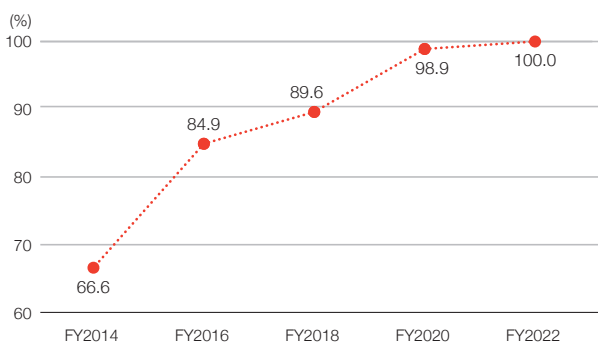
### Maintaining Proper Working Hours

The Proper Working Time Project was started in 2014 with measures that include improvements to the rules of employment and the initiation of no overtime days to prevent excessive working hours and encourage employees to take time off.

In 2017, the Group started using a new system for recording working time. This framework allows efficiently monitoring the number of hours on the job and when individuals go to work on a weekend or holiday.

We continued to take measures to raise awareness of the paid leave system among employees, such as designation of a month where encouraging them to take paid holidays. In FY2022, we achieved the target that all employees take 100 or more days off per year. For the fiscal year ending June 30, 2023, we increased the target number of days off to 110 and are continuing to encourage the use of vacation time.

### Percentage of Employees Taking 100 or More Days Off per Year



### Supporting Employees in Balancing Work and Child-rearing and/or Nursing Care

We provide employee assistance programs more than required by law and promote the use of them to allow employees to balance work and child-rearing and/or nursing care with confidence. To increase the use by men of time off for child care, a new system for encouraging the use of such programs started in 2019. A Child Care Leave Promotion Pamphlet has been prepared to raise the awareness and use of the programs. This has contributed to an increase in the use of child care leave by male employees. In FY2022, all male employees who were entitled to take child care leave actually took it.

In 2020, SHO-BOND CORPORATION received Kurumin certification as a company that supports child care.

	FY2018	FY2019	FY2020	FY2021	FY2022
Percentage of men who took child care leave	0.0%	45.8%	80.0%	65.0%	100.0%



### Selection of Employment Type and the Self-declaration System

The Group gives employees the flexibility to choose an employment type with or without transfers to different locations. Many individuals change this employment type to reflect the current stage of their lives. Every year, there are employees who ask to be shifted to or from status that allows transfers. The self-declaration system allows individuals to confirm their employment type and job status once every year.

## Diversity and Inclusion

### Promoting Women's Active Engagement and Advancement in Workplaces

The Group aims to increase the percentage of female engineers in regular recruiting to 15% or higher, and seeks to ensure more female engineers.

We keep a high female employee retention rate by providing training programs targeted at female engineers and conducting a monthly survey of how their minds have changed, in addition to making their workplace environments more employee-friendly. We will continue to recruit and develop more female engineers to have a higher retention rate and produce more female managers in the future.

	FY2018	FY2019	FY2020	FY2021	FY2022
Changes in the number of female engineers	14	16	18	23	26

# Efforts for Health and Safety

Based on the philosophy that our highest priorities are the protection of life and the safety of construction activities, not only will the SHO-BOND Group comply with laws and regulations related to occupational health and safety but all of its officers and employees will also work to eliminate workplace accidents as well as make efforts to maintain and promote good health. What is more, we will further aim to create comfortable working environments.

## Initiatives for Creating SHO-BOND Culture of Safety

### Project Overview

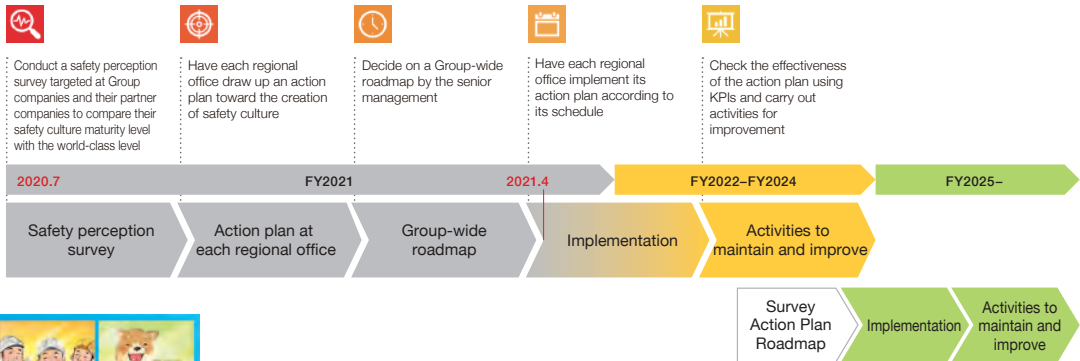
We believe that safe and secure workplace environments without an accident will be created by upgrading the Group's safety culture from the dependent model that workers do what they are told to the independent and mutually enlightening model that workers can proactively do their jobs without being told and mutually pay attention. Based on this belief, we promote initiatives for creating SHO-BOND culture of safety to realize a higher-level safety culture that aligns with our Health and Safety Policy.

#### Health and Safety Policy

1. We will achieve a safety culture that is of an even higher level.
2. We will establish a health and safety management system.
3. We will ensure the steady implementation of risk assessments.
4. We will carry out measures for the reduction of occupational accidents involving third parties and severe workplace accidents.
5. We will execute thoroughgoing health and safety education toward our own employees and the staff of our partner companies.
6. We will ensure thorough preventive measures for occupational diseases.
7. We will promote work style reforms for the prevention of health disorders caused by overwork.
8. We will thoroughly ensure the prevention of property damage accidents.

### Roadmap

for initiatives for creating SHO-BOND culture of safety



### Awarding Workers for their Outstanding Health and Safety Commitment

We award workers who have earnestly participated in health and safety activities on construction sites to raise safety awareness among employees.



Awarding a worker for his outstanding health and safety commitment at construction sites

### Safety Training

We provide on-site workers and other construction personnel with hands-on safety training on site to help them deepen their understanding of health and safety activities and naturally have safe behavior, mindset, and values.



On-site safety training

## ■ Digital Transformation (DX) in Health and Safety Activities

The Group drives the DX in health and safety activities to improve their effectiveness and reduce on-site workers' workloads. To this end, we formed a DX Promotion Working Team for safety. While identifying areas for improvement in the current health and safety activities, we are working to promote the DX by setting targets.

We installed 93 wearable video cameras in the Group's construction sites nationwide to enable workers to watch live streams and monitor the progress of projects from a regional office, branch, or on-site office. Such a system also enables an on-site worker and a client to connect on a livestreaming platform and enables the client to be present remotely.



Remote monitoring of construction sites using wearable video cameras

## ■ Health and Safety Patrols

President, General Managers of Regional Offices and Branches, and other senior members occasionally go out on health and safety patrols to eliminate workplace accidents and improve the health and safety levels. They conducted a total of 3,950 patrols nationwide in FY2022.



Health and safety patrol by President



Health and safety patrol by General Manager of Branch

## ■ Health and Safety Classes

The Group provides safety training programs to employees of the Construction Department, Marketing and Sales Department, and Engineering Department in July every year. In FY2022, the programs were provided in seven installments, all of which were online due in part to the COVID-19 pandemic. Contents of the programs included the overviews of workplace accidents and property damage accidents occurred in FY2022 and priority actions to take in FY2023. We also provided special education and health and safety classes by in-house lecturers to our engineers and a total of 444 employees from 81 partner companies in FY2022.

At the Tsukuba Training Center completed in October 2021, we started providing education through which employees can acquire knowledge about health and safety and experience safety hazards using VR headsets. Going forward, we will expand the scope of trainees to include employees of partner companies and other personnel, and provide practical health and safety classes to improve each trainee's risk perception and foster their awareness of health and safety, including values, decision criteria, and beliefs.



VR hands-on experience of safety hazards (VR video on the left [for illustrative purposes] and employees wearing VR headsets on the right)

# Corporate Governance

## Basic Views

The SHO-BOND Group positions corporate governance as one of the highest management priorities to realize our corporate philosophy “With a sense of mission of ‘Inheriting and passing on social infrastructure to the next generation in good condition,’ we will contribute to the realization of a safe and affluent society by utilizing our advanced technological development capability as a leading company in the structure maintenance business.”

By fulfilling our social responsibility as a company that specializes in the maintenance business, we will work together with our shareholders and all other stakeholders to achieve sustainable growth and enhance our corporate value over the medium to long-term. In addition, we will aim for a highly sound and transparent management by developing and promoting a corporate governance system that enables swift and decisive decision-making.

## Progress in Strengthening Corporate Governance

We transitioned to the holding company system ahead of our industry peers and later became a company with an Audit and Supervisory Committee to strengthen corporate governance. We will continue maintaining a proper governance system while keeping a close eye on social circumstances.

Date	Event
January 2008	Transitioned to the holding company system
September 2015	Transitioned to a company with an Audit and Supervisory Committee and shortened directors' term of office to one year
September 2017	Increased the number of Outside Directors to three
July 2018	Started evaluating the effectiveness of the Board of Directors
November 2018	Established the Nomination and Remuneration Advisory Committee
August 2022	Established the Sustainability Committee

## Overview of Corporate Governance System

### Board of Directors

The Board of Directors has eight members including four directors who are members of the Audit and Supervisory Committee. The directors discuss and reach decisions about important matters involving management as prescribed by laws and regulations and the rules for the Board of Directors. As a rule, the board meets once every month and meets at other times as needed in order to reach decisions quickly. (Number of meetings in FY2022: 13 times)

### Audit and Supervisory Committee

SHO-BOND is a company with Audit and Supervisory Committee. The Audit and Supervisory Committee has four members, of whom three are Outside Directors. As a rule, the committee meets once every month and meets at other times as needed. The Audit and Supervisory Committee, as an independent body, audits and supervises the performance of directors who are not members of the Audit and Supervisory Committee. The committee also prepares audit reports and reaches decisions about matters prescribed based on laws and regulations, the Articles of Incorporation, and Audit and Supervisory Committee rules and audit standards. The Audit and Supervisory Committee works with the accounting auditor and the Audit Office to perform audits efficiently. (Number of meetings in FY2022: 11 times)

### Nomination and Remuneration Advisory Committee

The Nomination and Remuneration Advisory Committee has four members; three Outside Directors and the President and Representative Director. This committee is actively involved in formation and execution of the succession plan for the President, has adequate discussions about matters on directors' nomination and remuneration and gives opinions and advice to the Board of Directors. (Number of meetings in FY2022: 3 times)

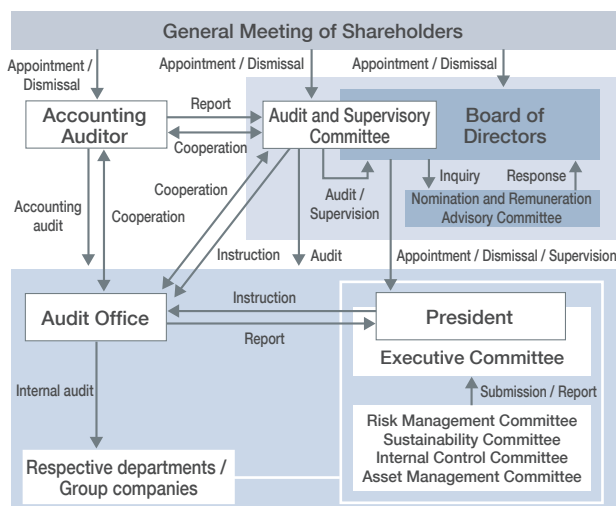
### Executive Committee

The President and Representative Director presides over the Executive Committee as a body to assist his decision-making in management. This committee consists of directors who are not members of the Audit and Supervisory Committee and senior executives, including the executives of SHO-BOND subsidiaries, nominated by the President. As a rule, the committee meets twice every month and meets at other times as needed in order to reach decisions quickly. (Number of meetings in FY2022: 22 times)

### Internal Committees

Major committees related to business execution include the Risk Management Committee, Sustainability Committee, Internal Control Committee and the Asset Management Committee. Important management issues are continuously discussed by theme at these committees, and submitted and reported to the Executive Committee as needed.

### Overview of Corporate Governance System



## Method of Evaluating Effectiveness of the Board of Directors

To evaluate the effectiveness of the Board of Directors, a third-party external adviser is used in order to ensure objectivity every other year. The evaluation is performed by asking all directors, including members of the Audit and Supervisory Committee, to complete self-evaluation questionnaires. The Board of Directors reviews the one-year efforts to address the recognized issues, and conducts self-analysis and evaluation in the year after the evaluation by questionnaire.

### Summary of Evaluation Results

For the fiscal year ended June 2022, a third-party external adviser is used to conduct a survey of all directors, including members of the Audit and Supervisory Committee. As a result, the evaluation based on the analysis of the responses confirmed the effectiveness of the Board of Directors.

One of the issues that needed to be addressed in FY2022 was offering better executive training. To address this issue, we held three directors' study sessions to improve their knowledge and abilities as directors. We will continue to improve the effectiveness of the Board of Directors by further deepening discussions on sustainability management and continually enhancing executive training.

## SHO-BOND's Outside Directors

The Company elects three Outside Directors who are Audit and Supervisory Committee members.

Mr. Satoru Miura has knowledge and experience as a certified public accountant as well as considerable experience as a corporate accounting advisor. Mr. Akira Hongo has knowledge and experience as an attorney as well as considerable experience as a corporate consulting attorney. Ms. Reiko Kuwano has considerable academic expertise and experience in the field of civil engineering as a professor at the University of Tokyo. These persons play a role in ensuring the properness of the business execution of the Company by drawing on their respective knowledge and experience and providing oversight and advice from an independent standpoint as an Outside Director. None of the three Outside Directors have personal, capital or business relationships or any other special interests with the Company. In addition, the standards for Independent Outside Directors in the Company's Corporate Governance Guidelines comply with the independence standards of financial instruments exchanges. We seek to provide the Outside Directors with information in an efficient and in-depth manner so that they can fully understand the Group and exercise their abilities to the fullest in management. When the Outside Directors make inquiries, relevant executive officers directly give explanations to them as necessary, promoting smooth communication with them.

## Dialogue with Shareholders and Investors

The Group places importance on information disclosure and dialogue with shareholders, institutional investors, analysts, and other interested parties. For institutional investors, we hold an information meeting about financial results twice a year as well as one-to-one meetings held every quarter. In addition to such one-to-one meetings more than 100 times a year, we hold a small meeting attended by President after announcing the full-year financial results. For individual shareholders, we hold information meetings in Tokyo and Osaka in March every year after transitioning to the holding company system in 2008. Dialogues are consistent with the spirit of fair disclosure, and care is exercised to prevent the disclosure of insider information. The Executive Committee and the Board of Directors regularly receive feedback periodically concerning the opinions and concerns of shareholders. This information helps management take actions aimed at achieving sustained growth.

The basic policy for investor relations is to provide accurate, fair and timely information about our management strategies, business activities, financial condition, and other items. The purpose is to build long-term relationships rooted in trust and receive a proper evaluation from all stakeholders. This policy is posted on our website.

Activity	Frequency (FY2022)
Information meetings for individual shareholders*	We refrained from holding the meetings due to the COVID-19 pandemic.
Information meeting for institutional investors (attended by President and Chief Financial Officer)	2 times
One-to-one meetings by Chief Financial Officer	102 times

\*The meetings are held in Tokyo and Osaka in March every year.

# Corporate Governance

## Details of Compensation for Directors (and Other Officers)

At Board of Directors meeting held on September 26, 2019, the SHO-BOND Group resolved the policy regarding decisions on the details of the compensation, etc. for each individual Director (excluding Directors serving as Audit and Supervisory Committee Members; hereinafter "Directors"), and the details of such are as follows:

As the Company is a holding company that is in charge of supervising Group companies, the compensation for the Company's Directors comprises basic compensation only. Furthermore, the payment of basic compensation shall be monthly fixed compensation in cash.

All of the Company's Directors, other than Outside Directors, concurrently serves as Director or Auditor of a subsidiary. Compensation is determined by proportionately taking into consideration the weight of the business of both the Company and subsidiaries, and multiplying it by the monthly compensation amount of subsidiaries. Furthermore, bonuses, which are paid depending on financial results, are paid by the subsidiaries to which the Directors belong. In determining compensation, etc., the President and Representative Director prepares a compensation proposal, including the portion to be paid by subsidiaries, that is determined at a Board of Directors meeting after consulting the Nomination and Remuneration Advisory Committee, which comprises the Company's Outside Directors and the President and Representative Director.

In determining the details of individual compensation, etc. for Directors pertaining to the fiscal year ended June 30, 2022, the Company judged that it is in line with this policy as the Nomination and Remuneration Advisory Committee carried out a multifaceted investigation of the original proposal, and the Board of Directors made the determination after taking into consideration the report from the Nomination and Remuneration Advisory Committee.

The upper limit on compensation to Directors is ¥350 million per year (not including employee salaries), and the upper limit on compensation to Directors serving as Audit and Supervisory Committee Members is ¥50 million per year, both of which were resolved at the 8th Annual General Meeting of Shareholders held on September 25, 2015.

### Total Amount of Compensation, etc. for the Fiscal Year Ended June 30, 2022 (Million Yen Unless Otherwise Stated)

Category	Number of Directors (persons)	Amount	Total amount of remuneration by type: Basic remuneration
Directors (excluding Directors serving as Audit and Supervisory Committee Members) [of which, Outside Directors]	5 [-]	83 [-]	83 [-]
Directors (Audit and Supervisory Committee Members) [of which, Outside Directors]	4 [3]	24 [19]	24 [19]
Total	9 [3]	107 [19]	107 [19]

Note: The above number of directors includes one director serving as Audit and Supervisory Committee member who retired at the closing of the 14th Annual General Meeting of Shareholders held on September 28, 2021.

## Cross-shareholdings

As a rule, the Group does not purchase or hold the stock of suppliers and other business partners with the exception of cases where purchasing and holding stock helps conduct business operations efficiently and maintain and strengthen business relationships, thereby contributing to the medium- to long-term growth of its corporate value.

Holdings of the stock of other companies are examined individually by taking into consideration of qualitative and quantitative benefits and risk factors, including holding purposes, the amount of transactions with these companies, their operating environment, results of operations and financial position, dividend yields as a return of investments and stock price fluctuation risks. Holdings are reduced when there is little need to continue owning the stock in accordance with the current Medium-term Business Plan.

Voting decisions concerning the stock of other companies are based on the goals of increasing shareholder value and contributing to the long-term growth of the corporate value of them.

## Internal Control

The SHO-BOND Group has a system of internal controls for ensuring that all business operations are conducted properly in accordance with the Companies Act and Ordinance for Enforcement of the Companies Act. In addition, the Board of Directors has established The Basic Policy for Constructing an Internal Control System that has the goals of efficient business activities, reliable reports, strict compliance with laws and regulations, and other items.

We are taking various measures, including the establishment of an Internal Control Committee and a department in charge of promoting internal control in FY2019, in order to further strengthen internal control within the Group and permanently ensure a favorable control environment.



## Directors



President and Representative Director

**Tatsuya Kishimoto**

April 2001 Joined SHO-BOND CORPORATION  
 April 2011 Director and Executive Officer, and General Manager of Kinki Regional Office  
 July 2012 Senior Managing Director and General Manager of Kinki Regional Office  
 September 2012 Director of the Company  
 April 2013 Senior Managing Director and General Manager of Marketing and Sales Division of SHO-BOND CORPORATION  
 April 2015 Executive Vice President and Director  
 April 2017 President and Representative Director  
 Director and General Manager of Corporate Planning Department of the Company  
 May 2017 President of General Incorporated Foundation Ueda Memorial Foundation (current position)  
 September 2017 President and Representative Director of the Company (current position)  
 July 2021 President and Representative Director, and General Manager of Marketing and Sales Division of SHO-BOND CORPORATION (current position)



Director and General Manager of Technology Promotion Department

**Koyo Takeo**

April 1979 Joined SHO-BOND CORPORATION  
 January 2010 Director and Executive Officer, and General Manager of Kyushu Regional Office  
 April 2011 Director and Executive Officer, and General Manager of Engineering Department at Head Office, Marketing and Sales Division  
 July 2012 Director and Managing Executive Officer, and General Manager of Engineering Division of SHO-BOND CORPORATION  
 September 2013 Director and General Manager of Technology Promotion Department of the Company (current position)  
 April 2014 Senior Managing Director and General Manager of Engineering Division of SHO-BOND CORPORATION  
 April 2017 Senior Managing Director, General Manager of Engineering Division, and Director of Technical Research Institute  
 April 2019 Executive Vice President and Representative Director, and General Manager of Technical Research Institute (current position)



Director and General Manager of Corporate Planning Department

**Yasuhiro Sekiguchi**

April 1989 Joined The Mitsubishi Bank, Ltd. (currently MUFG Bank, Ltd.)  
 May 2014 General Manager of Strategic Investment Division  
 July 2017 Joined SHO-BOND CORPORATION  
 December 2017 Director, Deputy General Manager of Corporate Administration Division and General Manager of Corporate Planning Department of SHO-BOND CORPORATION  
 September 2018 Director and General Manager of Corporate Planning Department (current position)  
 April 2020 Managing Director, Deputy General Manager of Corporate Administration Division and General Manager of Corporate Planning Department of SHO-BOND CORPORATION  
 September 2022 Managing Director, General Manager of Corporate Administration Division, General Manager of Corporate Planning Department, and General Manager of ESG Promotion Office, Corporate Planning Department (current position)



Director and General Manager of Sales Management Department

**Shigeru Naraoka**

May 1989 Joined SHO-BOND CORPORATION  
 July 2012 Director and Executive Officer, and General Manager of Chubu Regional Office  
 July 2016 Director and General Manager of Sales Management Department of SHO-BOND MATERIAL CO., LTD.  
 April 2017 Director and General Manager of Marketing and Sales Department, Marketing and Sales Division of SHO-BOND CORPORATION  
 April 2018 President and Representative Director of SHO-BOND MATERIAL CO., LTD. (current position)  
 April 2019 Director and General Manager of Sales Management Department, Marketing and Sales Division of SHO-BOND CORPORATION  
 September 2019 Director and General Manager of Sales Management Department of the Company (current position)



Director and Full-time Audit and Supervisory Committee Member

**Shunya Tojo**

November 1990 Joined SHO-BOND CORPORATION  
 July 2012 Director and General Manager of Administration and Human Resources Department of SHO-BOND CORPORATION  
 April 2014 Managing Director, General Manager of Corporate Administration and Human Resources Department  
 September 2015 Director, General Manager of General Affairs Department, and General Manager of Compliance Department  
 September 2017 Managing Director, General Manager of Corporate Administration Division, and General Manager of Administration and Human Resources Department of SHO-BOND CORPORATION  
 Director and General Manager of Public Relations Department of the Company  
 April 2019 Senior Managing Director, General Manager of Corporate Administration Division, and General Manager of Administration and Human Resources Department of SHO-BOND CORPORATION  
 Director and General Manager of General Affairs Department of the Company  
 September 2022 Director (Full-time Audit and Supervisory Committee Member) of the Company (current position)



Outside Director

Audit and Supervisory Committee Member

**Satoru Miura**

April 1981 Registered as certified public accountant (to present)  
 June 1990 Established Miura C.P.A. Office (to present)  
 February 2015 Outside Corporate Auditor of NODA CORPORATION (current position)  
 March 2015 Corporate Auditor of Toukei Computer Co., Ltd.  
 March 2017 Outside Director (Audit and Supervisory Committee Member)  
 September 2017 Outside Director (Audit and Supervisory Committee Member) of the Company (current position)  
 September 2021 Auditor of SHO-BOND CORPORATION



Outside Director

Audit and Supervisory Committee Member

**Akira Hongo**

April 1988 Registered as attorney at law (to present)  
 April 1995 Established Hongo sogo Law Office (to present)  
 April 2010 Professor of Keio University Law School (current position)  
 September 2017 Outside Director (Audit and Supervisory Committee Member) of the Company (current position)



Outside Director

Audit and Supervisory Committee Member

**Reiko Kuwano**

April 1989 Joined TAISEI CORPORATION  
 March 1999 Research Associate of the University of Tokyo  
 October 2001 Senior Researcher of Public Works Research Institute  
 April 2006 Associate Professor, Institute of Industrial Science of the University of Tokyo  
 Professor (current position)  
 July 2013 Outside Director (Audit and Supervisory Committee Member) of the Company (current position)  
 September 2017

### Knowledge, Experience, Skills, etc. of Each Director (Skill Matrix)

No.	Name	Inside / Outside	Corporate management	Finance / Accounting	HR	Legal affairs / Compliance / Risk management	Global	Technology / R&D
1	Tatsuya Kishimoto	Inside	●		●	●		●
2	Koyo Takeo	Inside	●		●	●		●
3	Yasuhiro Sekiguchi	Inside	●	●		●	●	
4	Shigeru Naraoka	Inside	●				●	●
5	Shunya Tojo	Inside	●		●	●		
6	Satoru Miura	Outside	●	●		●		
7	Akira Hongo	Outside			●	●		
8	Reiko Kuwano	Outside					●	●

Skill items	Details
Corporate management	Contributes to management based on experience taking part in corporate management, making of significant corporate decisions, etc.
Finance / Accounting	Contributes to management based on experience and knowledge related to finance and accounting
HR	HR refers to Human Resources. Contributes to management based on knowledge and experience related to the formulation of human resource strategies, human resource development and training, diversity, working style reforms, etc.
Legal affairs / Compliance / Risk management	Contributes to management based on knowledge and experience related to legal affairs, compliance and risk management
Global	Contributes to management based on knowledge and experience related to overseas business development, etc.
Technology / R&D	R&D refers to Research and Development Contributes to management based on knowledge and experience related to technology and R&D

Note: The table is not indicative of all the expertise and experience possessed by the Directors.

# Risk Management

## Risk Management Framework

The Group has risk management rules and a Risk Management Committee to be prepared for events that can have a major impact on business activities and reduce exposure to these risk factors. Risk management also includes measures to minimize damage and losses if a crisis occurs and to prevent incidents from happening again.

The Risk Management Committee plays a central role in risk management at the Group. The Committee chaired by President and Representative Director meets once a quarter as a general rule. The Committee puts together individual risks discussed in other internal committees to (1) identify risks and implement preventive measures, (2) act as an emergency response headquarters when a crisis may occur, and (3) develop actions to prevent incidents from happening again across the Group. The Committee periodically evaluates risk factors according to the established process, and constantly reexamines the risk management process itself to reflect current changes in the social and business environment.

### Risk Management Framework Chart



### Risk Management Process

Process	Explanation
1 Risk identification	Business risk factors of the SHO-BOND Group are divided into Risk Categories and specific potential problems are identified for each risk factor. Magnitude of risk is defined as "the impact of an incident" multiplied by "the probability of the incident happening."
2 Risk analysis and monitoring	Studies to determine numerical and other indicators for individual risk factors and the methods for monitoring them. Monitoring for changes in "the impact of an incident" and "the probability of the incident happening." Estimates of changes in risk exposure by using a qualitative analysis of changes in regulations, amendments to laws, government financial policies and other items that are difficult to measure numerically.
3 Risk control	Prepare lists of business tasks that every business unit performs periodically in order to measure and monitor risk factors. Next, check to confirm that risk factors are being controlled by these business tasks.
4 Risk evaluation	By using the reports from business units, the executive in charge of risk management assesses the magnitude of every risk factor and submits a report to the Risk Management Committee. The Risk Management Committee determines priorities concerning the magnitude and categories of risk factors and discusses methods for the efficient management of risk.
5 Responses to incidents	Emergency response manuals to be prepared for incidents. Perform studies concerning crisis management activities, such as direct responses to incidents, crisis management meetings, reports to government offices and agencies, public announcements about emergencies, and other responses to incidents.

## Information Security Measures

With the acceleration of DX and changes in the usage environment of information systems, information security risk has been increasing these days, such as the growing sophistication of external cyberattacks. In the construction industry in particular, ensuring information security is an urgent issue as construction site offices are exposed to major information security risks. We therefore raise awareness of these risks among employees by taking such measures as having all employees including the executive officers complete e-learning courses, conducting a phishing drill, and distributing awareness posters to our construction sites across Japan. Going forward, we will prevent unauthorized access from outside the Group and computer viruses by sequentially taking more defensive and detective network security measures.

## Business Continuity Plan

The Group has a business continuity plan (BCP) to address disaster risk such as a great earthquake. We strive to improve our capability to continue business operations based on the BCP on a regular basis to avoid the disruption of key operations as much as possible in the event of a major disaster and to return to normal operations early if disrupted.

We periodically conduct an evacuation drill and first aid training on the assumption that a great earthquake has occurred. We also conduct a drill of responding to a safety confirmation email and have each site regularly check the items of an emergency kit. We will continue to upgrade the BCP and expand the scope of areas covered by it to reduce disaster risk.

# Compliance

## Basic Concept for Compliance

The SHO-BOND Group believes that a sound compliance framework is vital to conducting business activities that meet high standards of social responsibility and are capable of sustainable growth. The SHO-BOND Group Code of Conduct enables all employees to do their jobs based on a thorough understanding of socially acceptable behavior, laws and regulations, internal rules and other guidelines.

All employees at the group are dedicated to the achievement of the action principles "Corporate Credo" and the Corporate Philosophy by using a broad range of activities for earning the trust of society and all stakeholders.

## Compliance Promotion Framework

The Group implements a compliance program. The SHO-BOND Group Code of Conduct clearly states the rules of behavior that its employees are expected to follow. We also have a compliance manual to ensure that all employees are aware of the importance of compliance.

In addition, we have close cooperation among Group companies by establishing a Compliance Office responsible for compliance matters and assigning a compliance leader to each site.

Further, we provide education and training to all employees of the Group to raise compliance awareness.

## Compliance Training

The Group provides compliance education as part of training for new employees and follow-up training\* provided each year. In the training, we give a general compliance lecture and urge employees to observe the SHO-BOND Group Code of Conduct. We also ensure that employees are aware of the Construction Business Act that must be observed as a construction company.

We seek to create an employee-friendly work environment by periodically having all employees do a self-check and providing them with e-learning to prevent all forms of harassment.

\*Follow-up training is targeted at employees for their second year and those who have just got promoted.

## Whistleblowing Contact Points

The Group has internal and external contact points for whistleblowers to report any kind of violation they detect, regardless of its agent (individual or organization) and the type of regulations violated (applicable laws, the rules of employment, the SHO-BOND Group Code of Conduct, etc.). The purpose is to investigate and eradicate such violations as soon as we can.

We pay due care so that whistleblowers will remain anonymous as a general rule and will not suffer any disadvantages.

## Establishment of Anti-bribery Policy

The Group has sought to maintain sound business practices. In August 2022, we established an Anti-bribery Policy to clarify our anti-corruption philosophy from a sustainability perspective. Based on the SHO-BOND Group Code of Conduct, we will continue to uphold high ethical standards to prevent bribery, and continue to ensure fair and sound relationships with our customers and all other stakeholders.

## The SHO-BOND Group Code of Conduct

### Social mission

#### 1. Earn customer satisfaction and trust

We will fulfill all of our contractual obligations with customers and, based on sound communications with customers, provide the best possible construction services and products by making proper and timely decisions.

#### 2. Provide outstanding technologies and quality

We will constantly develop new technologies and aim for even higher quality.

### Take responsibility for your actions

#### 3. Perform sales activities properly

We refuse to engage in collusion, bribes, dumping and other improper activities for receiving orders and will never accept any invitation to participate in these types of activities. We will work closely with project owners and prime contractors in order to receive orders in a fair manner and to clearly define contract terms.

#### 4. Remain focused on suitable construction operations and safety

At all projects, we will establish a framework for compliance with the Construction Business Act and other construction laws and regulations, preventing accidents, and facilitating mutual understanding and cooperation with partner companies and suppliers.

#### 5. Ensure that accounting procedures and disclosure activities are proper

We will establish and adhere to fair and appropriate procedures for accounting activities to ensure the reliability of financial reports and disclose information required by our stakeholders.

#### 6. Eliminate antisocial forces

We refuse to respond to improper requests from antisocial forces and will never have any relationship with antisocial forces.

#### 7. Maintain a sound crisis management framework

We have an organizational crisis management framework in order to respond immediately to a natural disaster, cyberattack, terrorism or other crisis.

### Unify the workplace

#### 8. Contribute to maintaining a pleasant and productive workplace environment

We will maintain healthy and safe workplace environments through measures to improve employment terms and other working conditions.

#### 9. Show respect for human rights

We will never allow discrimination or other improper treatment of our employees regarding employment and compensation based on their nationality, gender, beliefs or other personal characteristics.

#### 10. Play a role in placing the right people in the right jobs

We will perform fair and appropriate performance evaluations and provide compensation and training with the goal of enabling our employees to fully utilize their capabilities.

### Contribute to society

#### 11. Participate in community involvement

We will increase opportunities for communications with communities in order to participate in many programs for contributing to society.

#### 12. Be part of environmental conservation activities

We will reduce the environmental impact of our construction projects through many activities in order to combat global warming, conserve energy and protect the environment in other ways.

# 11-Year Data

		FY2012	FY2013	FY2014	FY2015
<b>Orders</b>	(million yen)	51,545	47,229	55,546	54,811
<b>Net Sales</b>	(million yen)	44,368	51,792	49,599	52,124
<b>Gross Profit</b>	(million yen)	9,652	10,300	10,614	12,643
<b>Gross Profit Margin</b>	(%)	21.8	19.9	21.4	24.3
<b>Selling, General and Administrative Expenses</b>	(million yen)	3,120	3,443	3,078	3,499
<b>Operating Profit</b>	(million yen)	6,532	6,856	7,535	9,144
<b>Operating Profit Margin</b>	(%)	14.7	13.2	15.2	17.5
<b>Ordinary Profit</b>	(million yen)	6,867	7,221	7,932	9,480
<b>Profit Attributable to Owners of Parent</b>	(million yen)	3,687	4,349	5,008	5,926
<b>Total Assets</b>	(million yen)	64,364	70,259	70,708	75,784
<b>Net Assets</b>	(million yen)	47,801	51,797	56,081	61,470
<b>Equity Ratio</b>	(%)	74.3	73.7	79.3	81.1
<b>ROE</b>	(%)	7.9	8.7	9.3	10.1
<b>ROA</b>	(%)	6.0	6.5	7.1	8.1
<b>Net Cash Provided by (Used In) Operating Activities</b>	(million yen)	4,591	4,058	4,835	4,804
<b>Net Cash Provided by (Used In) Investing Activities</b>	(million yen)	-706	-1,511	-4,807	-690
<b>Net Cash Provided by (Used In) Financing Activities</b>	(million yen)	-1,208	-1,370	-1,503	-1,801
<b>Cash and Cash Equivalents at End of Period</b>	(million yen)	15,090	16,277	14,803	17,127
<b>Basic Earnings per Share</b>	(yen)	68.50	80.79	93.05	110.11
<b>Net Assets per Share</b>	(yen)	887.98	962.22	1,041.82	1,141.93
<b>Dividend per Share</b>	(yen)	25.00	27.50	32.00	39.00
<b>Dividend Payout Ratio</b>	(%)	36.5	34.0	34.4	35.4
<b>PER</b>	(times)	16.9	24.2	24.9	23.2
<b>Number of Employees</b>		753	755	744	752

Note: The Company has conducted a stock split of two common shares for every one common share on July 1, 2019.

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
	53,509	60,536	67,859	74,380	84,436	74,548	96,065
	52,334	53,250	59,682	60,824	67,590	80,065	81,193
	12,709	13,797	14,781	16,082	17,319	20,782	22,555
	24.3	25.9	24.8	26.4	25.6	26.0	27.8
	3,406	3,637	4,000	4,354	4,389	5,050	5,288
	9,303	10,160	10,781	11,727	12,930	15,732	17,267
	17.8	19.1	18.1	19.3	19.1	19.6	21.3
	9,648	10,516	11,187	12,165	13,507	16,302	17,669
	6,267	6,997	7,301	8,080	9,005	11,340	12,366
	77,327	84,266	90,976	94,595	102,667	109,807	117,423
	63,701	69,243	74,096	78,108	83,617	90,960	94,247
	82.4	82.2	81.4	82.5	81.4	82.8	80.2
	10.0	10.5	10.2	10.6	11.1	13.0	13.4
	8.2	8.7	8.3	8.7	9.1	10.7	10.9
	4,386	7,484	1,734	4,550	4,540	2,737	7,834
	-2,365	-3,793	-2,063	-5,572	16,778	-2,638	5,315
	-2,152	-2,606	-3,147	-3,312	-4,179	-4,485	-9,177
	16,981	18,073	14,594	10,256	27,395	23,012	27,023
	116.43	130.00	135.64	150.11	167.30	210.68	231.06
	1,183.40	1,286.36	1,376.52	1,450.27	1,553.10	1,688.64	1,768.42
	43.50	52.00	62.50	67.50	79.50	105.50	118.00
	37.4	40.0	46.1	45.0	47.5	50.1	51.1
	19.9	21.8	28.4	25.3	28.5	22.0	25.8
	759	788	819	855	881	916	951

What is the SHO-BOND Group?

Management Strategies

Business Strategies

Sustainability

Corporate Governance

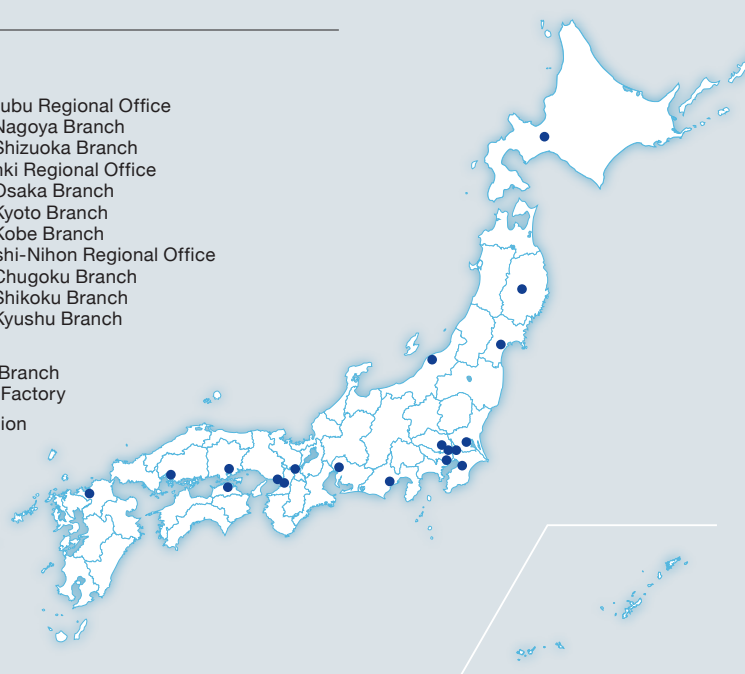
Company Information

# Company Profile/Stock Information (As of June 30, 2022)

## Major Bases

**Domestic**

- SHO-BOND Holdings Co., Ltd.
- SHO-BOND CORPORATION
  - Head Office
  - Technical Research Institute
  - Kita-Nihon Regional Office
  - Hokkaido Branch
  - Kita-Tohoku Branch
  - Minami-Tohoku Branch
  - Shutoken Hokuriku Regional Office
  - Tokyo Branch
  - Chiba Branch
  - Kanto Branch
  - Hokuriku Branch
- SHO-BOND MATERIAL CO., LTD.
  - Head Office/Kawagoe Factory
  - Tokyo Branch/Overseas Business Department
- SHO-BOND & MIT Infrastructure Maintenance Corporation
- KAKO-Group
  - TOHOKU KAKO CORPORATION
  - KAKO CORPORATION
  - KANTO KAKO CORPORATION
  - YOKOHAMA KAKO CORPORATION
  - NIIGATA KAKO CORPORATION
  - CHUBU KAKO CORPORATION
  - KANSAI KAKO CORPORATION
  - CHUGOKU KAKO CORPORATION
  - SHIKOKU KAKO CORPORATION
  - KYUSHU KAKO CORPORATION
- Kyna-Tech
- Maintenance Technology Inc.

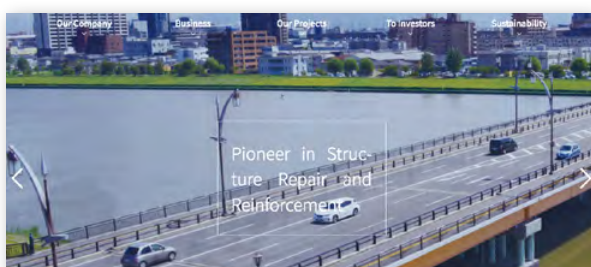


- Chubu Regional Office
- Nagoya Branch
- Shizuoka Branch
- Kinki Regional Office
- Osaka Branch
- Kyoto Branch
- Kobe Branch
- Nishi-Nihon Regional Office
- Chugoku Branch
- Shikoku Branch
- Kyushu Branch

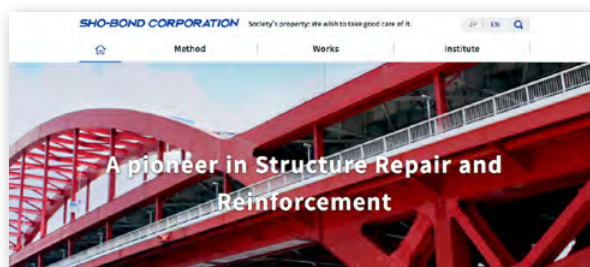
**Overseas**

- SHO-BOND (HONG KONG) Ltd. [Hong Kong]
- CPAC SB&M Lifetime Solution Co., Ltd. [Bangkok]

## Our Websites



[SHO-BOND Holdings Co., Ltd.](https://www.sho-bondhd.jp/english/)  
<https://www.sho-bondhd.jp/english/>



[SHO-BOND CORPORATION](https://www.sho-bond.co.jp/en/)  
<https://www.sho-bond.co.jp/en/>



[SHO-BOND MATERIAL CO., LTD. \(Japanese version only\)](https://www.sb-material.co.jp/)  
<https://www.sb-material.co.jp/>



[SHO-BOND official channel \(Japanese version only\)](https://www.youtube.com/channel/UChNSBYmP9fe1gQvtHzWHv0a)  
<https://www.youtube.com/channel/UChNSBYmP9fe1gQvtHzWHv0a>

## Company Profile

Company name	SHO-BOND Holdings Co., Ltd.
Date of establishment	January 4, 2008
Head office	7-8, Nihonbashihakozaki-cho, Chuo-ku, Tokyo, Japan
TEL	+81-3-6892-7101 (Representative)
President and Representative Director	Tatsuya Kishimoto
Amount of capital	¥5.0 billion
Business	Establishment of corporate strategies, management, and related operation of businesses of subsidiaries engaged in civil engineering and construction work contracting, etc.
Number of employees	951 (consolidated basis)
Principal consolidated subsidiaries	SHO-BOND CORPORATION SHO-BOND MATERIAL CO., LTD.

## Status of Major Shareholders

Shareholder name	Number of shares (Thousand shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	5,806	10.91
General Incorporated Foundation Ueda Memorial Foundation	5,408	10.16
SSBTC CLIENT OMNIBUS ACCOUNT	4,983	9.36
Custody Bank of Japan, Ltd. (Trust account)	4,627	8.69
MUFG Bank, Ltd.	2,658	4.99
The Dai-ichi Life Insurance Company, Limited	2,420	4.54
Custody Bank of Japan, Ltd. (Trust account 4)	2,027	3.81
NORTHERN TRUST CO. (AVFC) RE FIDELITY FUNDS	1,996	3.75
Meiji Yasuda Life Insurance Company	1,584	2.97
SMBC Nikko Securities Inc.	1,025	1.92

## Stock Price

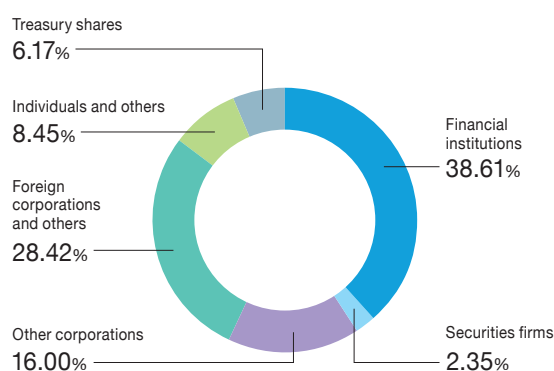


Note: The Company has conducted a stock split of two common shares for every one common share on July 1, 2019.

## Stock Information

Total number of shares authorized to be issued	120,000,000 shares
Total number of issued shares	56,745,180 shares
Stock exchange listing	Tokyo Stock Exchange Prime
Securities code	1414
Number of shareholders	10,331
Accounting period	June 30, each year
Annual general meeting of shareholders	September each year
Shareholder registry administrator Account management institution for specific accounts	Mitsubishi UFJ Trust and Banking Corporation

## Shareholders Ratio (Percentage of Owned Shares)





**SHO-BOND Holdings Co., Ltd.**

7-8 Nihonbashihakozaki-cho, Chuo-ku, Tokyo 103-0015, Japan

TEL.+81-3-6892-7101 (Representative)

<https://www.sho-bondhd.jp/english/>